DOCUMENT RESUME

ED 193 237	TM 800 551
TITLE	Technical Assistance Guide for Proficiency Assessment [and] Resource Catalog for Proficiency Assessment. First Revised Edition.
INSTITUTION	California State Dept. of Education, Sacramento. Office of Program Evaluation and Research.
PUB DATE	77
NOTE	142p.
AVAILABLE FROM	Publications Sales, California State Department of Education, P.O. Box 271, Sacramento, CA 95802 ($7.50)
EDRS PRICE	MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	Academic Standards; Basic Skills; Community Involvement; *Compliance (Legal); *Educational Assessment; *Graduation Requirements; Minimum Competencies; *Minimum Competency Testing; *Program Implementation; Records (Forms); *State Legislation; State School District Relationship; Testing Programs
IDENTIFIERS	*California

ABSTRACT

California Assembly Bill 3408 requires school districts to adopt their own standards in basic skills, including reading comprehension, writing, and computation. Students must be tested at least once in grades 7-9 and twice in grades 10-11. After June, 1980, students who do not meet standards will not receive a high school diploma. Assembly Bill 65, the comprehensive school finance legislation, extended the requirements to elementary schools, requiring assessment at least once in grades 4-6. Districts are required to provide additional instruction for pupils who do not meet standards. The legislation emphasizes student, teacher, and community involvement and awareness. To comply legally, districts must: (1) establish a budget; (2) review curriculum for relevance; (3) set written standards; (4) adopt alternative means of completing the prescribed course of study such as work experience, college credit, or independent study; and (5) inform the public about graduation requirements and alternatives. Districts may adopt other standards for students with diagnosed learning disabilities. Individual schools must test students, remediate those who fail, and confer with their parents. (CP)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED193237

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

TECHNICAL ASSISTANCE GUIDE for Proficiency Assessment

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

T. Smith

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Prepared by the
California State Department of Education
and approved by the
California State Board of Education

TM 800551

Publishing Information

This guide was approved for distribution to the schools of California by the California State Board of Education at its September, 1977, meeting. The members of the Board at that time were Marion W. Drinker, President; Michael W. Kirst, Vice-President; Louis Honig, Jr.; Patricia D. Ingoglia; Virla R. Krotz; Nancy Reeves; Lorenza C. Schmidt; Tony N. Sierra; and Lenore Wax.

The guide was developed by the Department of Education's Office of Program Evaluation and Research and the Division of Secondary Education (now Secondary Education Program Management). The document, which was edited and prepared for photo-offset production by the Bureau of Publications, was published by the California State Department of Education, 721 Capitol Mall, Sacramento, CA 95814, and distributed under the provisions of the Library Distribution Act.

Copies of this publication are available for $7.50 each, plus sales tax for California residents (6 percent in most counties; 6½ percent in four Bay Area counties), from Publications Sales, California State Department of Education, P.O. Box [illegible], Sacramento, CA 95802.

A list of [illegible] publications available from the Department, *Selected Publications of the California State Department of Education* may be obtained by writing to the same address.

Foreword

The enactment of Assembly Bills 3408 and 65 represented the California Legislature's response to a growing public demand for increased emphasis on the basic skills in public education. The law requires each local education agency to design a basic skills assessment program for its elementary schools and high schools.

The legislation places the State Board of Education and the State Department of Education in the role of providing guidance and technical assistance, while assigning the ultimate decision-making authority to each local school district. For example, the legislation required the State Board of Education to prepare and distribute to school districts a "framework for assessing pupil proficiency in reading comprehension, writing, and computation skills." To fulfill this requirement, the Department developed this process guide and two *Sample Assessment Exercises Manuals* (one for grades four through six and one for grades seven through eleven). This guide was originally distributed in October, 1977; the high school version of the manuals was distributed in March, 1978; and the elementary version was distributed in February, 1979. Both versions of the manuals contain sample items (test questions), item specifications, and field test statistics.

The Department's technical assistance efforts have been a cooperative project of the Office of Program Evaluation and Research, the Division of Secondary Education, and various other departmental units. As you will note in the acknowledgments, many persons from throughout California helped in the development of the guide, and I am especially grateful to them and the several school districts that permitted us to use materials they had developed in response to the legislative mandate.

This guide is presented in a looseleaf binder format so that new and updated material may be added. The guide is divided into these main sections:

- I—Legal requirements of AB 3408 and related requirements of AB 65
- II—Interpretation of legislative intent for enacting basic skills assessment
- III—A step-by-step implementation guide, including suggested procedures for involving the community and helping students with special needs
- IV—Appendixes, including papers on the legal implications of proficiency assessment and the district option of setting differential standards for students with diagnosed learning handicaps/disabilities
- *Resource Catalog*, including abstracts of assessment resource materials

I hope the framework developed by the State Department of Education will be a useful tool for school districts and offices of county superintendents of schools to use in developing proficiency assessment procedures. We welcome any suggestions for including additional materials. Please direct your comments and send your sample materials to: Proficiency Assessment Project, Office of Program Evaluation and Research, California State Department of Education, 721 Capitol Mall, Sacramento, CA 95814.

Wilson Riles

Superintendent of Public Instruction

Acknowledgments

This guide was developed jointly by the Office of Program Evaluation and Research and the Division of Secondary Education of the California State Department of Education. In addition the Department owes a debt of gratitude to the many school and community persons who contributed valuable resource papers and comments on drafts of the guide. Special appreciation is expressed to Dale Russell, Program Evaluation, Research, and Pupil Services, Office of the Los Angeles County Superintendent of Schools, who served as head technical writer of the document. Others who developed useful resource papers were Jerry Haines, Principal, Pioneer High School, Whittier Union High School District; Stuart J. Mandell, Director of Research, Planning, and Development, East Whittier City Elementary School District; Richard "Pete" Mesa, Deputy Superintendent, Instruction and Curriculum, Mountain View-Los Altos Union High School District; John Plakos, Consultant, Office of the Los Angeles County Superintendent of Schools; Marie Plakos, Administrator, Curriculum, Norwalk-La Mirada Unified School District; Thomas Riley, Director, Research and Evaluation, Office of the Fresno County Superintendent of Schools; Cora Schultz, Coordinator, Developmental Laboratory, Newport-Mesa Unified School District; Eugene Tucker, Superintendent, ABC Unified School District; Jim Wakeman, Educational Measurement and Evaluation Consultant, Garden Valley; Helen Wallace, Superintendent, Liberty Elementary School District, Petaluma; Marvin J. Woodstrup, Director, Education Services, Fairfield-Suisun Unified School District; Kenneth Wright, Coordinator, Individually Guided Education Programs, Office of the Tulare County Superintendent of Schools; and Vic Doherty, Assistant Superintendent, Pupil Personnel Services, Portland, Oregon School District.

The Department is also grateful to the persons who so willingly gave of their time and expertise to serve on the Department's AB 3408 Ad Hoc Committee. The committee met regularly to assist the Department in assessing needs for assistance, clarifying issues, and reviewing drafts of the guide. Committee members included: Dorothy Astorga, Specialist in Compensatory, Bilingual, and Multicultural Education, Stockton Unified School District; Billy DeBerry, Principal, Monterey High School; Ann Freers, Assistant Superintendent, Instructional Services, Office of the Santa Clara County Superintendent of Schools; Steve Fuller, Student, Carmichael; Bob Hurst, School Board Member, Capistrano Unified School District; Vi Heintz, Public Member, Fresno; Ben Hughes, Teacher, Red Bluff High School; Georgia Inglis, Public Member, Los Altos; Jennifer Karstedt, Student Representative, Lincoln High School, San Jose; Michael Kirst, Vice-President, State Board of Education, and School of Education, Stanford University; Walt Lansu, Administrator, Reading Support Services Center, Los Angeles Unified School District; Patricia Larson, School Board Member, Palm Springs; Felix McCrory, Director, Planning, Personnel, and Research, Oakland Unified School District; Richard Mesa, Deputy Superintendent, Instruction and Curriculum, Mountain View-Los Altos Union High School District; Miles Meyers, Teacher, School of Education, University of California, Berkeley; D. A. Morrissey, Superintendent, Whittier Union High School District; Phillip Oakes, Director, Research and Evaluation, San Juan Unified School District, Carmichael;

AUG 4 1980

Ruth Peck, School Board Member, Goleta; Marilyn Pennebaker, Public Member, Orinda; Dorothy Rochelle, Public Member, Los Angeles; Renee Sanders, Student, Westchester High School, Los Angeles; Jane Stallings, Stanford Research Institute, Menlo Park; Evelyn Stanton, Public Member, Hillsborough; Dodd Thorpe, Superintendent, Yreka Union High School District; Hank Weiss, Executive Vice-President, Industry-Education Council of California, Burlingame; Cornelia Whitaker, Director, Curriculum, San Juan Unified High School District, Carmichael; and Ernest Wutzke, Principal, Ygnacio Valley High School, Concord.

Contents

Page

Foreword iii

Acknowledgments v

List of Charts ix

Use of This Guide x

Glossary xi

Section I – Legal Requirements for Proficiency Standards and Their Effect on School Districts I-1
  Comparative Analysis of AB 3408 and AB 65 . . . . I-2
  Education Code Provisions Requiring Proficiency Standards (AB 3408 as modified by AB 65) I-8
  Questions and Answers About the New Law I-10

Section II – The Meaning of Assessment of Basic Skills in California School Districts II-1
  Local Control and Responsibility II-1
  Meaning of Minimum Standards II-1
  Need for Credibility II-2
  Major Logistical Challenge II-2

Section III – Guide for Implementing a Proficiency Assessment Program III-1
  Getting Organized III-1
    Developing a Management Plan III-1
    Initiating Community Involvement III-6
  Putting the Plan into Action III-6
    Setting Goals and Achieving Consensus III-7
    Developing and Selecting Instructional Objectives III-7
    Developing a Rationale III-8
    Defining Basic Skills III-8
    Defining Reasonable Expectations III-8
    Determining Assessment Procedures III-8
    Selecting Assessment Items and Exercises III-9
    Making Enroute and Final Assessments III-9

Proficiency Assessment for Limited English Speaking and Non-English Speaking Students III-10
Developing Assessment Procedures III-13
Selecting Assessment Instruments III-13
Reviewing and Pretesting Assessment Procedures III-13
Setting Standards of Proficiency III-14
Setting Differential Standards III-14
Evaluating Proficiency Assessment III-15
Working with the Assessment Data III-15
Reporting the Assessment Information III-17
Informing the Governing Board III-17
Informing the Public III-17
Contacting the News Media III-17

Section IV – Appendixes

A – Sample Assessment Exercises Manuals A-1

B – Proficiency Assessment Requirements in California: A Status Report B-1

C – Guidelines for Editing Test Items C-1
    Selecting and Reviewing Items C-1
    Reviewing the Mechanical Features of the Test C-3

D – Considerations for Conducting an Assessment D-1

E – Sample Forms for Recording and Reporting Proficiency Assessment Data E-1
    Record of Student Proficiency Assessment–Reading E-2
    Student Progress Chart in Meeting Graduation Requirements E-3
    Individual Student Mastery Report E-4
    Item Analysis Report E-5
    Objective Matrix Report E-6

F – Sample Form for Recording Information on Proficiency Assessment Conferences F-1

G – Background Information and Sample News Releases for the Media G-1
    Background Information on Assembly Bill 3408 . . . . G-1
    Sample News Release for Broadcast Media G-2
    Sample News Release for Newspapers G-3

H – Sample Forms for Making Community Surveys H-1
    Survey for Determining Minimum Requirements for High School Graduation H-1
    Survey for Determining Student Proficiency Levels for High School Graduation H-2

I – Sample Management and Operations Plans I-1
J – Suggested Announcement on Proficiency Assessment to Be Given to Students J-1
K – Developing Proficiency Programs in California Public Schools: Some Legal Implications and a Suggested Implementation Procedure K-1
L – Setting Differential Standards L-1
M – Bias and Fairness in Proficiency Assessment M-1

Section V – Selected References V-1

Section VI – Resource Catalog for Proficiency Assessment VI-1

List of Charts

Analysis of Statewide Proficiency Requirements I-2
Questions and Answers About Proficiency Assessment I-11
Major Management Tasks III-2
  District Tasks III-2
  Individual School Tasks III-4
Overall Plan for Managing Pupil Assessment Information III-15

Use of This Guide

The *Technical Assistance Guide for Proficiency Assessment* was designed to help California school districts comply with current law which requires districts to develop and adopt assessment procedures to measure student proficiency attainment in the basic skills.

The step-by-step processes outlined in this guide, primarily in Section III, are intended to provide a framework for district and school implementation procedures and to demonstrate the importance of linking proficiency assessment directly to the goals and objectives of the entire instructional program.

Key steps which districts and individual schools will need to address in order to comply with the law include the following, which are discussed in greater detail in Section III of the guide:

District Concerns

- Defining basic skills, including, but not limited to, reading comprehension, writing, and computation
- Developing or selecting assessment procedures
- Assigning standards (levels) of proficiency attainment in each skill area

Individual School Concerns

- Administering the assessment procedures (tests) and evaluating results
- Planning conference procedures and supplementary instruction
- Designing a plan for recording and reporting assessment information
- Evaluating current instructional programs in light of assessment results
- Providing for alternative means to complete the prescribed course of study

Many school districts may find that they have already completed the initial steps outlined in this guide. However, districts are encouraged to examine the contents page to determine where they can best begin utilizing this guide to develop a local assessment plan.

Glossary

Affective learning. Learning which emphasizes a person's feelings and emotions; i.e., learning that capitalizes on a person's feelings, opinions, interests, attitudes, and values.

Applied performance model. A model for generating assessment items and exercises. Applied performance tests are designed to measure proficiencies and/or competencies in the most direct manner possible. For example, to assess proficiency in computation, the student may be required to make correct change while operating a cash register in a local business.

Assessment. The process of measuring skills and/or their development.

Basic skills. Those skills, as defined by a school district, which will allow a pupil to function effectively in contemporary society, including at least the skills of writing, reading comprehension, and computation.

Cognitive learning. Learning which emphasizes intellectual tasks; i.e., knowledge that a person acquires through various forms of education.

Competency. The ability to develop with proficiency basic skills in patterned activities which constitute adult life-roles.

Computation. Ability to read, write, and comprehend numbers. It also involves manipulating numbers in order to perform arithmetical and mathematical operations and using these operations in a variety of contexts.

Criterion. A reference used to judge and describe behavior, such as basic skill development. For example, a score (criterion for passing) on a test measuring proficiency in a basic skill could be used to determine whether a person can perform at least at an acceptable level to be deemed proficient.

Criterion-referenced measures. Measures developed to determine whether an individual can perform acceptably when compared to a preestablished standard.

Diagnosed learning disability. Clinical term used in special education. The term diagnosis implies an identification of causal factors which interfere with a student's learning. The term disability implies a persistent and irreversible state.

Differential standards. Standards set for students with diagnosed learning disabilities. Local school district governing boards are permitted to set these standards.

District's assessment procedures. Tests, structured observations, work samples, or other forms of instrumentation used to gather data on pupil proficiencies.

Enroute assessment of pupil proficiencies. Measurements done at periodic intervals to verify a student's attainment of functional proficiency levels and to monitor a student's skill development. Used as an aid to early identification of pupils lacking proficiency in skills necessary to function well in society.

Functional transfer model. A model for generating assessment items and exercises. The functional model assesses whether students can transfer learning from the classroom to actual or simulated life situations. Functional proficiencies can be assessed in the school setting. For example, to assess a student's skill in addition, the student may be required to determine the balance owed on a billing invoice listing two or more item entries. Reading comprehension could be assessed by requiring the student to read a product label and then to answer questions pertaining to the directions.

Goals. A statement of broad general direction or intent. The goals of a school district reflect what that district expects of its students and schools.

Item pools. Collections of items or exercises that have been constructed from test specifications. These items/exercises are then placed in an assessment device for measuring skill attainment.

Items. Individual test questions or exercises used to measure skill development.

Management plans. Plans that help managers follow a course of action designed to accomplish a task. The plans should make clear who will be involved, when, and how.

Norm-referenced measures. Measures developed for the purpose of comparing an individual's performance to the performance of others.

Proficiency. Level of skill development which a school district believes will give students the ability to function effectively in contemporary society.

Pupil assessment. Process of obtaining information usable for preparing an appropriate instructional program for individual pupils.

Reading comprehension. Processes ranging from recognizing alphabetic characters through critical thinking or being able to determine specific information which has been stated in a reading passage.

School context model. A basic model traditionally used in schools for generating assessment items and exercises.

For example, to assess a student's computational skills, the student may be expected to solve addition problems presented in word or numerical form. Reading comprehension may be assessed by asking questions directly related to the content of a reading passage. Writing may be assessed by recognizing spelling or punctuation errors or similar isolated aspects of writing. In the school context model, the student is expected to select the best answer from a list of possible answers.

Standard. A statement or series of statements describing the acceptable level of skill development for identifying pupils as proficient in a particular basic skill.

Writing competency. Skills ranging from the mechanics of spelling through written composition.

I.

Legal Requirements for Proficiency Standards and Their Effect on School Districts

Assembly Bill 3408 (Chapter 856, Statutes of 1976), which was enacted in September, 1976, became effective on January 1, 1977. This legislation required high school districts and unified school districts maintaining junior, senior, and four-year high schools to (1) establish district proficiency standards in reading comprehension, writing, and computation; and (2) assess, on a prescribed basis, the performance of students in grades seven through twelve.

Assembly Bill 3408 was substantially modified by Assembly Bill 65 (Chapter 894, Statutes of 1977), which was enacted on September 17, 1977. AB 65 redefined various high school proficiency requirements already mandated by AB 3408 and added requirements for the adoption of elementary school proficiency standards in basic skills by June, 1979. Since AB 65 was an "urgency statute," these changes are now in effect.

It is important to understand why statewide proficiency requirements were modified through AB 65. The new law is a comprehensive school support and school improvement measure, which was designed to move California toward substantial compliance with the *Serrano* mandate, to provide adequate funding for services to students with special needs, and to put in place a legal framework and financial structure for meaningful school improvement efforts in kindergarten through grade twelve. By modifying proficiency requirements through this comprehensive package, the Legislature and the Governor hoped to highlight the fact that proficiency standards in basic skills are not meant to be an "add-on" or categorical requirement, but an integral part of statewide school improvement efforts.

Prior to the enactment of statewide proficiency requirements (AB 3408 and AB 65), the law required only locally developed minimum graduation requirements, including a course of study and general standards of proficiency. After the passage of these two bills, the Education Code now provides for the following additional requirements:

- Each governing board of a high school district or a unified school district maintaining junior, senior, and four-year high schools must adopt its own standards of proficiency by June, 1978, in the basic skills, including, but not limited to, reading comprehension, writing, and computation.
- Each governing board of an elementary school district or unified school district maintaining grades six or eight, or the equivalent, must adopt its own standards of proficiency by June, 1979, in the basic skills listed above.
- High school districts and the elementary school districts within the high school districts must coordinate their work in developing proficiency standards, and they must make the standards well known to parents, students, teachers, and the community as a whole. Representatives of the high school and elementary school districts are required to meet with one another to discuss how this may be accomplished.
- In developing proficiency standards, the governing boards must involve parents, school administrators, teachers, and counselors in the process; and students must also be involved in the development of standards for the high schools.
- Beginning in 1978-79 for high schools, and in 1979-80 for elementary schools, the progress of students toward meeting proficiency standards shall be assessed at least once in grades four through six, once in grades seven through nine, and twice in grades ten through eleven. Once a student has met the standards up to prescribed levels for graduation from high school, his or her progress need not be reassessed.
- The school principal or the principal's designee shall hold a conference with each student who does not demonstrate sufficient progress

toward mastery of basic skills, and a meeting must also be held with the student's parent or guardian to discuss the assessment results and recommended actions to further the student's progress.

- Districts shall provide appropriate instruction in basic skills for those students who do not demonstrate sufficient progress toward mastery of basic skills.
- After June, 1980, any student who has not met the locally adopted standards of proficiency shall *not* receive a diploma of graduation from high school.
- By January 1, 1979, governing boards, with the active involvement of parents, administrators, teachers, and students shall adopt alternative means for pupils to complete the prescribed course of study mandated in existing law. This requirement is not directly related to the new requirements for proficiency standards in the three basic skill areas; but it is, nonetheless, an important requirement that districts must address.

Comparative Analysis of AB 3408 and AB 65

Assembly Bill 65 created a new article in the Education Code that contains (1) the general course of study requirements that existed prior to enactment of AB 3408; (2) the requirements added by AB 3408; and (3) modifications to AB 3408 and new requirements added by AB 65.

In an effort to help school districts clearly define their responsibilities, the Department of Education has prepared a comparative analysis of the statewide proficiency requirements. This analysis identifies each section of the proficiency requirements included in AB 65 and compares these requirements to those that were in existing law (AB 3408). Also included in the following analysis are explanatory comments on the AB 65 modifications.

Analysis of Statewide Proficiency Requirements

Provisions of AB 3408[1]	Provisions of AB 65	Comments
Local District Requirements		
51224 (8573). The governing board of any school district maintaining a high school shall prescribe courses of study designed to provide the skills and knowledge required for adult life for pupils attending the schools within its school district. The governing board shall prescribe separate courses of study, including, but not limited to, a course of study designed to prepare prospective students for admission to state colleges and universities and a course of study for vocational training.		This section was unchanged by AB 65 and remains in the Education Code.
51225 (8574). No pupil shall receive a diploma of graduation from high school who has not completed the course of study prescribed by the	**51225.** No pupil shall receive a diploma of graduation from high school who has not completed the course of study prescribed by the	Assembly Bill 3408 did not set a date by which districts must adopt "alternative means." AB 65 now sets January 1, 1979, as the date by which

---

[1] The various sections of the Education Code were renumbered through the passage of Assembly Bills 3100 and 3101 (Statutes of 1976); therefore, the new Education Code section numbers are given for the provisions of AB 3408, but the old section numbers are shown in parentheses as an aid to the reader.

Analysis of Statewide Proficiency Requirements (Continued)

Provisions of AB 3408[1]	Provisions of AB 65	Comments
governing board. Requirements for graduation shall include: (a) English (b) American history (c) American government (d) Mathematics (e) Science (f) Physical education, unless the pupil has been exempted pursuant to the provisions of this Code (g) Such other subjects as may be prescribed The governing board, with the active involvement of parents, administrators, teachers, and students, shall adopt alternative means for students to complete the prescribed course of study. which may include practical demonstration of skills and competencies, work experience or other outside school experience, interdisciplinary study, independent study, and credit earned at a postsecondary institution. Requirements for graduation and specified alternative modes for completing the prescribed course of study shall be made available to students, parents, and the public.	governing board. Requirements for graduation shall include: (a) English (b) American history (c) American government (d) Mathematics (e) Science (f) Physical education, unless the pupil has been exempted pursuant to the provisions of this Code. (g) Such other subjects as may be prescribed The governing board, with the active involvement of parents, administrators, teachers, and students, shall, by January 1, 1979, adopt alternative means for students to complete the prescribed course of study, which may include practical demonstration of skills and competencies, work experience or other outside school experience, interdisciplinary study, independent study, and credit earned at a postsecondary institution. Requirements for graduation and specified alternative modes for completing the prescribed course of study shall be made available to students, parents, and the public.	governing boards of districts maintaining high schools must adopt alternative means for students to complete the prescribed course of study.
51225.5 (8574.5). The governing board of any school district maintaining a junior or senior high school shall, by June 1, 1978, adopt standards of proficiency in basic skills for students attending schools within its school district. Governing boards maintaining junior high schools located within a school district shall adopt those standards of proficiency in basic skills adopted by the high school district. Standards of proficiency shall include, but not necessarily be limited to, reading comprehension, writing, and computation skills and shall be such as will enable individual achievement and ability to be ascertained and evaluated. The governing board may use academic standards for graduation distrib-	**51215.** The governing board of each school district maintaining a junior or senior high school shall, by June 1, 1978, adopt standards of proficiency in basic skills for pupils attending schools within its school district. The governing board of each school district maintaining grades 6 or 8, or the equivalent, shall, by June 1, 1979, adopt standards of proficiency in basic skills for pupils attending such grades. Such standards shall include, but need not be limited to, reading comprehension, writing, and computation skills, in the English language, necessary to success in school and life experiences, and shall be such as will enable individual achievement to be ascertained and evaluated. Differential	Assembly Bill 65 repealed Education Code Section 51225.5 and replaced it with a new Article 2.5 of the Education Code, entitled "Student Progress, Elementary and Secondary Schools." This new article includes sections 51215, 51216, and 51217. The major changes from the original AB 3408 requirements include the following: • Expanding the application of the law to elementary schools so that governing boards of districts maintaining grades six or eight, or the equivalent, must now adopt standards of proficiency in reading comprehension, writing, and computation for those grades by June, 1979.

---

[1] The various sections of the Education Code were renumbered through the passage of Assembly Bills 3100 and 3101 (Statutes of 1976); therefore, the new Education Code section numbers are given for the provisions of AB 3408, but the old section numbers are shown in parentheses as an aid to the reader.

Analysis of Statewide Proficiency Requirements (Continued)

Provisions of AB 3408[1]	Provisions of AB 65	Comments
uted by the State Board of Education pursuant to Section 8575 for this purpose. Subsequent to June, 1980, no pupil shall receive a diploma of graduation from high school who has not met the standards of proficiency in basic skills prescribed by the governing board. The governing board may adopt differential standards of proficiency in basic skills for pupils with diagnosed learning disabilities. The governing board shall take appropriate steps to ensure that individual pupils progress towards proficiency in basic skills is assessed during the regular instructional program at least one time during the seventh through ninth grade experience and at least two times during the tenth through eleventh grade experience, provided that the progress of any pupil who demonstrates proficiency in basic skills need not be reassessed. The governing board may use performance indicators distributed by the State Board of Education pursuant to Section 8575 for the purpose of conducting such individual pupil assessments. In the case of a pupil who does not meet district prescribed standards in basic skills, an appropriate school official shall arrange a conference among the pupil, the principal or the principal's designee, the parent or guardian, and, whenever practicable, a teacher familiar with the pupil's progress to discuss the results of the individual pupil assessment and the need for instruction in basic skills. The pupil and the parent or guardian shall be requested, in writing, to attend such conference. Within five days of the time such written request is postmarked, the school shall make a reasonable effort to contact the parent or guardian by telephone to communicate directly the information contained in the written request.	standards and assessment procedures may be adopted for pupils with diagnosed learning disabilities. Governing boards maintaining elementary or junior high schools located within a school district maintaining a high school shall adopt standards of proficiency in basic skills which are articulated with those standards adopted by the school district maintaining the high school. Designated employees of all school districts located within a high school district and one or more designees of the high school district shall meet prior to June 1, 1979, to plan for articulation of elementary and high school proficiency standards, and as necessary thereafter to review the effectiveness of such articulation procedures. Standards of proficiency shall be adopted by the governing board with the active involvement of parents broadly reflective of the socioeconomic composition of the district, administrators, teachers, counselors, and, with respect to standards in secondary schools, pupils.	• Basic skills proficiency standards are now defined to mean standards "in the English language, necessary to success in school and life experiences. . . ." • Governing boards maintaining elementary schools or junior high schools located within a school district maintaining a high school must coordinate and articulate their standards with those adopted by the district maintaining the high school. Designated employees of these districts must meet prior to June 1, 1979, to coordinate these standards, and as necessary thereafter to review the effectiveness of articulation procedures. • Added emphasis on staff, student, and community involvement so that standards of proficiency must now be adopted by governing boards "with the active involvement of parents broadly reflective of the socioeconomic composition of the district, administrators, teachers, counselors, and, with respect to standards in secondary schools, pupils."

---

[1] The various sections of the Education Code were renumbered through the passage of Assembly Bills 3100 and 3101 (Statutes of 1976); therefore, the new Education Code section numbers are given for the provisions of AB 3408, but the old section numbers are shown in parentheses as an aid to the reader.

Analysis of Statewide Proficiency Requirements (Continued)

Provisions of AB 3408[1]	Provisions of AB 65	Comments
	51216. Beginning in the 1978-79 school year, the governing board of each district maintaining a junior or senior high school, and beginning in the 1979-80 school year, the governing board of each district maintaining an elementary school, shall take appropriate steps to ensure that individual pupil progress towards proficiency in basic skills is assessed in the English language during the 4th through 6th grade experience, once during the 7th through 9th grade experience, and twice during the 10th through 11th grade experience, provided that any pupil who demonstrates proficiency up to prescribed levels for graduation from high school need not be reassessed. Nothing in this section shall preclude any district from conducting an assessment of any pupil in English and in the native language of such pupil. It is the intent or the Legislature that pupil assessments measure the progress of each pupil in mastering basic skills rather than the pupil's performance relative to his or her classmates. In the case of any pupil who does not demonstrate sufficient progress toward mastery of basic skills so that he or she will be able to meet prescribed standards upon exit from the 6th, 8th, or 12th grade, whichever is appropriate, the principal shall arrange a conference among the principal or the principal's designee, the parent or guardian of the pupil, and a teacher familiar with the pupil's progress to discuss the results of the individual pupil assessment and recommended actions to further the pupil's progress. The secondary school pupil shall attend the conference. The elementary school pupil shall attend the conference unless the principal's designee and the parent or guardian agree that such presence would not be in the pupil's best interest.	• Assessment of pupil progress towards proficiency in basic skills must begin in 1978-79 for secondary schools and in 1979-80, for elementary schools. Beginning in 1979-80, assessments must be conducted at least once during grades four through six. As already specified by AB 3408, beginning in 1978-79, assessments must still be conducted at least once in grades seven through nine and at least twice in grades ten through eleven. • Clarification is provided that "nothing in this (proficiency) section shall preclude any district from conducting an assessment of any pupil in English and in the native language of such pupil." This means that while proficiency standards and assessments related to "terminal" graduation standards must be conducted in English, assessment in the pupil's native language may also be conducted to plan supplementary instructional progress or for other purposes. • Legislative intent on the nature of individual assessments is clarified in that "pupil assessments measure the progress of each pupil in mastering basic skills rather than the pupil's performance relative to his or her classmates." This means that pupil progress must be measured individually against an absolute standard of basic skills mastery rather than as part of a group compared against national, state, district, school, or grade "norms." • Requirements for school-parent-pupil conferences are clarified as follows: 1. In the case of a pupil who "does not demonstrate sufficient progress towards mastery of basic skills so that he or she will be able to meet prescribed stan-

---

[1] The various sections of the Education Code were renumbered through the passage of Assembly Bills 3100 and 3101 (Statutes of 1976); therefore, the new Education Code section numbers are given for the provisions of AB 3408, but the old section numbers are shown in parentheses as an aid to the reader.

Analysis of Statewide Proficiency Requirements (Continued)

Provisions of AB 3408[1]	Provisions of AB 65	Comments
	The pupil and the parent or guardian shall be requested in writing to attend the conference. Such notice shall be written in the primary language of the parent or guardian, whenever practicable. Absent a response from the parent or guardian, the school shall make a reasonable effort to contact him or her by other means to communicate directly the information contained in the written request. At the conference, the principal or the principal's designee shall describe the instructional program which shall be provided to assist the pupil to master basic skills. If the parent or guardian does not attend the conference, the principal or the principal's designee shall communicate such information by other means within 10 days of the date of the conference. Instruction in basic skills shall be provided for any pupil who does not demonstrate sufficient progress toward mastery of basic skills and shall continue until the pupil has been given numerous opportunities to achieve mastery.	dards upon exit from the 6th, 8th, or 12th grade, whichever is appropriate," the principal is responsible for arranging a conference with the principal or principal's designee, the parent or guardian of the pupil, and a teacher familiar with the pupil's progress. 2. The high school student shall attend the conference. The elementary school pupil shall attend the conference unless the principal's designee and the parent or guardian agree that such presence would not be in the pupil's best interest. 3. At the conference, school personnel shall describe the results of the pupil's assessment and shall "describe the instructional program which shall be provided to assist the pupil to master basic skills." Should the parent or guardian not attend the conference, the principal or principal's designee must communicate the above information by other means within ten days of the date of the conference.
51226 (8575). (a) The State Board of Education shall by April 1, 1977, prepare and distribute to each school district maintaining a junior high school or high school for its consideration, examples of minimum academic standards for graduation, including performance indicators. The Department of Education shall include in this distribution the criteria used in developing standards of competency in basic skills pursuant to subdivision (b) of Section 12603 and representative examples of items used to test the attainment of such standards. These examples shall be provided solely to assist each school district in the development of its own minimum academic standards for graduation and standards	**51217.** Subsequent to June, 1980, no pupil shall receive a diploma of graduation from high school if he or she has not met the standards of proficiency in basic skills prescribed by the secondary school district governing board. The State Board of Education shall, by February 1, 1978, prepare and distribute to each school district maintaining a junior or senior high school, and by October 1, 1978, prepare and distribute to each district maintaining an elementary school, a framework for assessing pupil proficiency in reading comprehension, writing, and computation skills. Such framework shall include a range of assessment items in each skill area. The assessment frame-	Section 51217 retains the requirement that local districts may not issue a diploma of graduation from high school after June, 1980, unless a pupil has met the district prescribed standards of proficiency. Section 51217 also clarifies State Department of Education requirements, as follows: 1. The requirement for distribution of the April 1, 1977, materials is deleted, as these materials have already been distributed. 2. A requirement for "a framework for assessing pupil proficiency" to be distributed to districts maintaining elementary schools by October 1, 1978, is added to the existing

---

[1] The various sections of the Education Code were renumbered through the passage of Assembly Bills 3100 and 3101 (Statutes of 1976); therefore, the new Education Code section numbers are given for the provisions of AB 3408, but the old section numbers are shown in parentheses as an aid to the reader.

Analysis of Statewide Proficiency Requirements (Continued)

Provisions of AB 3408[1]	Provisions of AB 65	Comments
of proficiency in basic skills as required by Section 8574.5 (b) The State Board of Education shall, by February 1, 1978, prepare and distribute to each school district maintaining a junior high school or high school for its consideration, a framework for assessing pupil proficiency in reading comprehension, writing, and computation skills. Such framework shall include a range of assessment items in each skill area in order to enable a school district to select items consistent with standards of proficiency in basic skills adopted by the district governing board pursuant to Section 8574.5 (c) Nothing in this section shall be construed to authorize or require the State Board of Education to adopt statewide minimum academic standards for graduation from high school.	work shall be provided solely to assist each school district in the development of its own pupil assessment as required by Section 51216. Nothing in this section shall be construed to authorize or permit the State Board of Education to adopt statewide minimum proficiency standards for high school graduation.	requirement that such a framework be distributed to districts maintaining junior and senior high schools by February 1, 1978. Both frameworks are to include "a range of assessment items in each skill area." *NOTE:* The preceding section was further modified by AB 2043, passed in 1978, which extended the delivery date for the elementary framework from October 1, 1978, to February 1, 1979.
Appropriations		
For State Department of Education		
Section 8. The sum of one hundred seventy-five thousand dollars ($175,000) is hereby appropriated from the General Fund to the Department of Education for the purpose of preparing and distributing the framework for assessing pupil proficiency required by Section 8575 of the Education Code.	Section 65. The sum of four hundred thousand dollars ($400,000) is hereby appropriated from the General Fund for transfer to, and in augmentation of, Item 300 of the Budget Act of 1977, for the purpose of preparing and distributing the framework for assessing pupil progress required by Section 51217 of the Education Code.	Section 65 of AB 65 appropriates $400,000 to the Department of Education to prepare the framework for assessing pupil proficiency and to distribute it by October 1, 1978, to districts maintaining elementary schools.
For local school districts		
Section 9. Commencing [with the] 1978-79 fiscal year, the sum of two hundred twenty-four thousand dollars ($224,000) is hereby appropriated from the General Fund to the State Controller for allocation and disbursement to local agencies pursuant to Section 2231 of the Revenue and Taxation Code to reimburse such agencies for costs incurred by them in notifying pupils and the parents and guardians thereof pursuant to Section 8574.5 of the Education Code.	Section 81. Commencing with the 1978-79 fiscal year, the sum of two hundred twenty-four thousand dollars ($224,000) is hereby appropriated from the General Fund to the State Controller for allocation and disbursement to districts maintaining junior and senior high schools pursuant to Section 2231 of the Revenue and Taxation Code to reimburse such districts for costs incurred by them in notifying pupils and the parents and guardians thereof pursuant to Section 51216 of the Education Code.	Section 81 deletes Section 9 of AB 3408 and reappropriates the same $224,000 provided to reimburse districts maintaining junior and senior high schools for costs incurred in the parent/guardian and pupil notifications required by Education Code Section 51216. These funds become available in 1978-79.

---

[1] **The various sections of the Education Code were renumbered through the passage of Assembly Bills 3100 and 3101 (Statutes of 1976); therefore, the new Education Code section numbers are given for the provisions of AB 3408, but the old section numbers are shown in parentheses as an aid to the reader.**

Analysis of Statewide Proficiency Requirements (Continued)

Provisions of AB 3408[1]	Provisions of AB 65	Comments
	Section 82. Commencing with the 1979-80 fiscal year, the sum of forty-six thousand dollars ($46,000) is hereby appropriated from the General Fund to the State Controller for allocation and disbursement to elementary school districts maintaining grades 6 or 8 pursuant to Section 2231 of the Revenue and Taxation Code to reimburse such districts for costs incurred by them in notifying pupils and the parents and guardians thereof pursuant to Section 51216 of the Education Code.	Section 82 provides $46,000 for the same purposes for districts maintaining elementary schools. These funds become available in 1979-80.
Section 10. Except as provided in Section 9 of this act, and notwithstanding Section 2231 of the Revenue and Taxation Code, there shall be no additional reimbursement pursuant to this act nor shall there be any appropriation made by this act because the duties, obligations, or responsibilities imposed on local governmental entities by this act are such that related costs are incurred as a part of their normal operating procedures.	Section 80. Except as otherwise provided in this act, and notwithstanding Sections 2229, 2230, and 2231 of the Revenue and Taxation Code, there shall be no additional reimbursement pursuant to this act nor shall there be any appropriation made by this act because the duties, obligations, or responsibilities imposed on local agencies by this act are either incurred as a part of their normal operating procedures or funded through other appropriations in this act.	Section 80 specified that other than the notification costs described above, no other district costs related to proficiency assessment may be reimbursed by the state. This is simply a reiteration of Section 10 of AB 3408.

Education Code Provisions Requiring Proficiency Standards (AB 3408 as modified by AB 65)

SEC. 42. It is the intent of the Legislature that pupils attending public schools in California acquire the knowledge, skills, and confidence required to function effectively in contemporary society.

The Legislature finds that high school graduation requirements are generally related to "seat time" and tied to college entrance requirements.

The Legislature further finds that some pupils currently graduating from the public schools lack competence in essential communication and computation skills and the confidence that they can cope successfully with a complex society.

It is the intent and purpose of the Legislature to ensure the development of clearly defined proficiency standards in basic communication and computation skills for pupils attending public schools. It is the purpose of Section 43 of this act to ensure early identification of pupils lacking competence in basic skills, so that such pupils can receive appropriate assistance to achieve mastery of such skills prior to high school graduation.

It is the purpose of Section 43.5 of this act to provide students with opportunities to use community education resources and to develop and demonstrate their abilities in a variety of educational settings.

---

[1] The various sections of the Education Code were renumbered through the passage of Assembly Bills 3100 and 3101 (Statutes of 1976); therefore, the new Education Code section numbers are given for the provisions of AB 3408, but the old section numbers are shown in parentheses as an aid to the reader.

SEC. 43. Article 2.5 (commencing with Section 51215) is added to Chapter 2 of Part 28 of the Education Code, to read:

Article 2.5. Student Progress, Elementary and Secondary Schools

51215. The governing board of each school district maintaining a junior or senior high school shall, by June 1, 1978, adopt standards of proficiency in basic skills for pupils attending school within its school district.

The governing board of each school district maintaining grades six or eight, or the equivalent, shall, by June 1, 1979, adopt standards of proficiency in basic skills for pupils attending such grades.

Such standards shall include, but need not be limited to, reading comprehension, writing, and computation skills, in the English language, necessary to success in school and life experiences, and shall be such as will enable individual achievement to be ascertained and evaluated. Differential standards and assessment procedures may be adopted for pupils with diagnosed learning disabilities.

Governing boards maintaining elementary or junior high schools located within a school district maintaining a high school shall adopt standards of proficiency in basic skills which are articulated with those standards adopted by the school district maintaining the high school.

Designated employees of all school districts located within a high school district and one or more designees of the high school district shall meet prior to June 1, 1979, to plan for articulation of elementary and high school proficiency standards, and as necessary thereafter to review the effectiveness of such articulation procedures.

Standards of proficiency shall be adopted by the governing board with the active involvement of parents broadly reflective of the socioeconomic composition of the district, administrators, teachers, counselors, and, with respect to standards in secondary schools, pupils.

51216. Beginning in the 1978-79 school year, the governing board of each district maintaining a junior or senior high school, and beginning in the 1979-80 school year, the governing board of each district maintaining an elementary school, shall take appropriate steps to ensure that individual pupil progress towards proficiency in basic skills is assessed in the English language during the regular instructional program at least once during the fourth through sixth grade experience, once during the seventh through ninth grade experience, and twice during the tenth through eleventh grade experience, provided that any pupil who demonstrates proficiency up to prescribed levels for graduation from high school need not be reassessed. Nothing in this section shall preclude any district from conducting an assessment of any pupil in English and in the native language of such pupil.

It is the intent of the Legislature that pupil assessments measure the progress of each pupil in mastering basic skills rather than the pupil's performance relative to his or her classmates.

In the case of any pupil who does not demonstrate sufficient progress toward mastery of basic skills so that he or she will be able to meet prescribed standards upon exit from the 6th, 8th, or 12th grade, whichever is appropriate, the principal shall arrange a conference among the principal or the principal's designee, the parent or guardian of the pupil, and a teacher familiar with the pupil's progress to discuss the results of the individual pupil assessment and recommended actions to further the pupil's progress.

The secondary school pupil shall attend the conference. The elementary school pupil shall attend the conference unless the principal's designee and the parent or guardian agree that such presence would not be in the pupil's best interest.

The pupil and the parent or guardian shall be requested in writing to attend the conference. Such notice shall be written in the primary language of the parent or guardian, whenever practicable.

Absent a response from the parent or guardian, the school shall make a reasonable effort to contact him or her by other means to communicate directly the information contained in the written request.

At the conference, the principal or the principal's designee shall describe the instructional program which shall be provided to assist the pupil to master basic skills. If the parent or guardian does not attend the conference, the principal or the principal's designee shall communicate such information by other means within 10 days of the date of the conference.

Instruction in basic skills shall be provided for any pupil who does not demonstrate sufficient progress toward mastery of basic skills and shall continue until the pupil has been given numerous opportunities to achieve mastery.

51217. Subsequent to June, 1980, no pupil shall receive a diploma of graduation from high school if he or she has not met the standards of proficiency in basic skills prescribed by the secondary school district governing board.

The State Board of Education shall, by February 1, 1978, prepare and distribute to each school district maintaining a junior or senior high school, and by October 1, 1978, prepare and distribute to each district maintaining an elementary school, a framework for assessing pupil proficiency in reading comprehension, writing, and computation skills. Such framework shall include a range of assessment items in each skill area. The assessment framework shall be provided solely to assist each school district in the development of its own pupil assessments as required by Section 51216.

Nothing in this section shall be construed to authorize or permit the State Board of Education to adopt statewide minimum proficiency standards for high school graduation.

SEC. 43.5. Section 51225 of the Education Code is amended to read:

51225. No pupil shall receive a diploma of graduation from high school who has not completed the course of study prescribed by the governing board. Requirements for graduation shall include:

(a) English
(b) American history
(c) American government
(d) Mathematics
(e) Science
(f) Physical education, unless the pupil has been exempted pursuant to the provisions of this code
(g) Such other subjects as may be prescribed

The governing board, with the active involvement of parents, administrators, teachers, and students, shall, by January 1, 1979, adopt alternative means for students to complete the prescribed course of study which may include practical demonstration of skills and competencies, work experience or other outside school experience, interdisciplinary study, independent study, and credit earned at a postsecondary institution. Requirements for graduation and specified alternative modes for completing the prescribed course of study shall be made available to students, parents, and the public.

SEC. 44. Section 51225.5 of the Education Code is repealed.

Questions and Answers About the New Law

Since AB 3408 became effective on January 1, 1977, a number of questions were raised concerning interpretations of certain sections of this law. Some of these questions addressed precise legal issues; others related to the author's and the Legislature's intent in enacting the law.

Many of the modifications of AB 3408 contained in AB 65 were designed to respond to these questions. Other questions have been answered by various expressions of the author's or the Legislature's intent. A few questions and issues remain unresolved.

It is almost impossible for the Department of Education to answer precisely and finally any unresolved questions for local school districts, because the Department has no mechanism for issuing legal opinions or legislative interpretations that are binding upon local districts. Therefore, to obtain binding and protective interpretations on legal issues relating to AB 3408, a local district is encouraged to seek and receive an opinion from its own county counsel.

The following questions and answers are divided into three sections: (1) questions addressed by modifications in AB 65; (2) questions clarified through various expressions of the author's or the Legislature's intent; and (3) questions that remain unanswered.

Appreciation is expressed to Assemblyman Leroy Greene, Chairman of the Assembly Education Committee; Assemblyman Gary K. Hart, original author of AB 3408; and the staff of the Assembly Education Committee for working closely with the Department to develop answers to the questions that have been raised about the new law.

Questions and Answers About Proficiency Assessment

Question	Answer
Questions Addressed by Modifications in AB 65	
1. Do proficiency requirements apply to elementary districts?	Yes. Education Code Section 51215 now requires all districts maintaining grades six or eight, or the equivalent, to adopt standards of proficiency in reading comprehension, writing, and computation by June, 1979.
2. Do proficiency requirements preclude assessment or instruction in languages other than English?	No. Education Code sections 51215 and 51216 specify that standards be established and that proficiency be demonstrated in the English language for the purposes of these sections. However, Section 51216 also says, "Nothing in this section shall preclude any district from conducting an assessment of any pupil in English and in the native language of such pupil." This means assessments in languages other than English can be conducted for a variety of purposes, including diagnosing the instructional needs of limited and non-English speaking students and monitoring their progress. In fact, in the context of an individualized or group bilingual education program, such assessments would be highly desirable.
Questions Clarified by Expressions of Author's or Legislature's Intent	
1. Do proficiency requirements apply to adult schools?	Yes. Insofar as adult schools grant high school diplomas consistent with the graduation requirements specified in the Education Code, proficiency requirements established under Education Code Section 51216 apply to adult schools. The above interpretation (the only one included in the previous edition of this guide) deals only with the requirements of Education Code Section 51216. Education Code Section 51217, which requires that subsequent to June, 1980, no pupil shall receive a diploma of graduation from high school if he or she has not met the standards of proficiency in basic skills prescribed by the district governing board, also applies to high school diploma programs maintained in adult schools. However, the procedural provisions of Education Code sections 51215 and 51216 do not apply to students defined as adults and enrolled in adult school programs. This means that for such students, the requirements for conducting assessments at prescribed grade levels, for notifying parent or guardian of conferences, and for providing supple-

Question	Answer
	mentary instruction do not apply. Nevertheless, adult diploma programs should include appropriate periodic assessments to let students know how they are progressing toward proficiency. Adult education personnel are encouraged to participate in all aspects of the development of any proficiency standards which will be applied to adult students. In addition, districts may wish to establish for adult programs proficiency standards in areas other than basic skills. Suggested guidelines and criteria for establishing a process that will lead to the development of these competencies or proficiencies is being prepared by the Adult Education Field Services Section of the Department of Education in conjunction with the California Adult Learner Competencies Committee. This information will be disseminated to the field upon its completion.
2. Can districts use successful completion of a specified course or set of courses to meet proficiency requirements?	Yes, provided that the course or courses include instruction in and assessment of pupil mastery of the specified basic skills, including demonstration of proficiency up to the required district standards.
3. Will fully or partially completed proficiency assessments be "transferable" if a student moves from one district to another? If so, how?	The Education Code does not specifically provide for reciprocity agreements among school districts to accept one another's proficiency standards and assessment procedures. However, the author's and the Legislature's intent is that districts handle reciprocity of proficiency standards as they have handled reciprocity of courses of study and other graduation requirements in the past.
4. Do proficiency requirements apply to children of migrant workers?	Yes. Children of migrant workers are covered by these requirements. In the coming months the Department of Education will be developing recommended procedures to assist districts in making known their proficiency standards to the children and families of migrant workers.
5. How will the funds set aside for the costs of notifying parents of the results of their children's assessments be distributed?	Section 81 of AB 65 provides $224,000 for disbursement in 1978-79 to districts maintaining junior and senior high schools. (This simply *replaces,* and is not over and above, the $224,000 provided in Section 9 of AB 3408.) Section 82 of AB 65 provides $46,000 for disbursement in 1979-80 to elementary school districts maintaining grades six or eight. These funds are provided solely

Question	Answer
	to reimburse districts for costs incurred in parent notification, pursuant to Education Code Section 51216. Funds up to the levels specified will be distributed under the provisions of Section 2231 of the Revenue and Taxation Code (the SB 90 local mandate section). The State Controller is responsible for specifying procedures for documenting and claiming expenditures under this section. The Controller's office has assured the Department that claiming procedures for funds available in 1978-79 will be distributed to districts maintaining junior and senior high schools by May 1, 1978.
Questions About the Differential Standards Option[1]	
1. Does the "differential standards option" allow districts to exempt special education pupils from proficiency requirements?	No. Special education pupils are not exempted from proficiency standards requirements of the Education Code. Rather, the law provides governing boards the option of setting different performance standards and assessment procedures for some of the pupils enrolled in special education programs. If districts choose not to exercise the option, all pupils in the district are subject to the regular district standards.
2. Can districts develop differential standards for pupils who may not be enrolled in special education programs but do meet a board-adopted definition of "diagnosed learning disabled"?	No. The recent amendment to the proficiency provisions (AB 2043, Chapter 893, Statutes of 1978) specifies that differential standards may be developed only for pupils enrolled in special education programs. In order to be enrolled in special education programs, a pupil must have been diagnosed and assessed by a local special education team and be receiving special education services.
3. Can differential standards be set for pupils who are low achievers but may not be enrolled in special education programs?	No. The intention of the proficiency law is that pupils be assessed in elementary school so that pupils who are not progressing adequately toward proficiency in the basic skills can be identified early and provided with remedial instruction. The new amendment to the law requires that differential standards may be provided only for pupils who meet *both* of the following criteria:

---

[1] A recent amendment (AB 2043, Chapter 893, Statutes of 1978) to the proficiency provisions of the Education Code clarifies the category of pupils for whom differential proficiency standards may be provided. The answers to the questions concerning differential standards are elaborated in Appendix L, "Setting Differential Standards," distributed by the Department in December, 1978.

Question	Answer
	1. Enrollment in a special education program pursuant to Education Code Part 30 (commencing with Section 56000) *and* 2. Possession of diagnosed learning handicaps or disabilities that would preclude their attaining the district's regular standards with appropriate educational services and support Any such differential standards must be included in the Individualized Education Program developed for the pupil pursuant to Part 30 (commencing with Section 56000). In addition, the definition of pupils with diagnosed learning handicaps or disabilities is meant to be broadly construed and not limited to pupils identified pursuant to Education Code sections 56600, 56601, or 56302.

Questions That Remain Unanswered

1. May districts issue "alternative" diplomas (e.g., "certificate of attendance") to students who fail to meet required proficiency standards?	As was noted in the initial release of the *Technical Assistance Guide for Proficiency Assessment*, the Attorney General was asked by the Legislature to provide an opinion on this question. The opinion was issued to Assemblyman Gary K. Hart on January 9, 1978. A full copy of the opinion appears on pages I-14a–I-14c, but the Attorney General's conclusion was as follows: While it is probable that a court would uphold the authority of a school district to issue a certificate of completion under the circumstances you describe, sufficient doubt exists as to the intent of the Legislature as to suggest that legislative clarification is desirable because of the impact of such uncertainty upon governing boards and upon affected pupils. In partial response to this opinion and in response to the Legislature's need for general information on the status of local implementation of new proficiency requirements, the Legislature will be scheduling an informational hearing in April, 1978. The hearing will allow county and district representatives to share their reactions to the Attorney General's opinion and to raise questions and issues related to implementation of proficiency requirements.

EVELLE J. YOUNGER
ATTORNEY GENERAL

STATE OF CALIFORNIA

OFFICE OF THE ATTORNEY GENERAL
Department of Justice
555 CAPITOL MALL, SUITE 350
SACRAMENTO 95814
(916) 445-9555

January 9, 1978

The Honorable Gary K. Hart
Assemblyman, 35th District
State Capitol, Room 5136
Sacramento, California 95814

Re: CV 77/101 IL

Dear Mr. Hart:

You have requested an opinion on the following question:

Does any existing provision of law preclude the governing board of any school district maintaining a high school after June of 1980 from conferring a certificate of completion, in lieu of a high school diploma, upon any pupil who has completed the district's prescribed course of study, but has failed to meet the standards of proficiency in basic skills of the district?

The conclusion is:

While it is probable that a court would uphold the authority of a school district to issue a certificate of completion under the circumstances you describe, sufficient doubt exists as to the intent of the Legislature as to suggest that legislative clarification is desirable because of the impact of such uncertainty upon governing boards and upon affected pupils.

ANALYSIS

Education Code section 51225.5 provides, in part, that "...subsequent to June 1980, no pupil shall receive a diploma of graduation from high school who has not met the standards of proficiency in basic skills prescribed by the governing board. The governing board may adopt differential standards of proficiency in basic skills for pupils with diagnosed learning disabilities . . . ." (All section references hereinafter are to the Reorganized Education Code.)

No existing provision of law expressly precludes the governing board of any school district maintaining a high school after June 1980 from conferring a certificate of completion in lieu of a high school diploma upon any pupil who has completed the district's prescribed course of study but who has failed to meet the standards of proficiency in basic skills established by the district.

It could be argued that the language of section 51225.5 to the effect that "...no pupil shall receive a diploma of graduation . . . who has not met the standards of proficiency in basic skills . . ." implies that a pupil who does not meet such standards fails to complete high school satisfactorily and, therefore, that no diploma or certificate may be awarded which suggests to the contrary.

But the language used by the Legislature certainly does not compel such a conclusion. It must be recalled that the Legislature recently added section 35160 so as to provide that:

> "On and after January 1, 1976, the governing board of any school district may initiate and carry on any program, activity, or may otherwise act in any manner which is not in conflict with or inconsistent with, or preempted by, any law and which is not in conflict with the purposes for which school districts are established."

Since the "standards of proficiency in basic skills" which are required to be established by section 51225.5 "include, but [are] not necessarily . . . limited to, reading comprehension, writing, and computation skills . . . [to] enable individual achievement and ability to be ascertained and evaluated," it does appear that a valid distinction may be drawn between completing a district's prescribed course of study on the one hand, yet failing to meet the standards of proficiency in basic skills on the other hand.

To the extent that a certificate of completion does appear to have a substantive difference from a diploma of graduation, it is likely that a court would hold that section 35160, supra, provides sufficient statutory authority so as to authorize a school district to issue such a certificate in lieu of a diploma.

Of further interest, however, is section 51410 which provides in part that:

> "No diploma, certificate or other document which is conferred upon a pupil as evidence of his completion of a prescribed course of study or training shall bear any distinctive marking or words which indicate that the pupil upon whom it was conferred was, for purposes of his course of study or training, placed within a particular classification based upon his intellectual or mental capacity. . . ."

To the extent that the reason for granting a certificate of completion is because a pupil has failed satisfactorily to qualify for a diploma of graduation, a strong argument can be advanced supporting the conclusion that a certificate of completion, issued for that reason, is so distinctive as to indicate a "classification" of the student based upon his or her intellectual or mental capacity.

This reasoning could compel a court to conclude that such a certificate would violate section 51410 and, therefore, the necessary statutory authorization to issue such a certificate could not be found in section 35160, supra. Equally clearly, however, the failure to grant a diploma of graduation has the same negative effect as the issuing of a certificate of completion where the basis for such an act is the failure of the pupil to meet the district's standards of proficiency in basic skills. It is difficult to predict how a court would react to these interpretations in the absence of facts showing their impact upon affected pupils.

While it is probable that a court would uphold the authority of a school district to issue a certificate of completion under the circumstances you describe, sufficient doubt exists as to the intent of the Legislature as to suggest that legislative clarification is desirable because of the impact of such uncertainty upon governing boards and upon affected pupils.

We trust this brief expression of our views is of assistance to you.

Very truly yours,

EVELLE J. YOUNGER
Attorney General

II.

The Meaning of Assessment of Basic Skills In California School Districts

Assembly Bill 3408 is likely to have great impact on the design and management of instructional programs in California's public schools. It is hoped that by examining the intent of the legislation and the specific requirements of the law, districts will design proficiency standards and procedures to ensure that students graduate from high school proficient in basic skills.

Assembly Bill 3408 was a direct response to the growing public perception that some students graduate from high school with insufficient communication and computation skills. The Legislature considered the fact that present graduation requirements are most often based on "seat time," rather than on any indication by students that they are proficient in the basic skills. The Legislature also recognized that some students' learning styles could best be served by allowing the students to develop and test their abilities in a variety of settings outside the school and the classroom.

Local Control and Responsibility

The proficiency requirements added by AB 3408 have the potential for enhancing the skills of students and the effectiveness of schools. However, if the requirements are poorly implemented, they can be of great harm. For example, inadequate standards and assessment procedures could promote "tracking" systems in which students become labeled. Unreasonable standards could become a punitive mechanism to discourage some students from continuing their education.

It is especially important that districts ensure that proficiency standards and accompanying assessment and instructional procedures are carefully coordinated with all phases of the instructional program. In its technical assistance activities, the Department of Education will provide suggestions that districts may incorporate in their implementation procedures. The Department of Education's role in implementing AB 3408 is not regulatory. Rather, materials produced by the Department, including this guide, are advisory and not meant to be prescriptive.

Districts should recognize that AB 3408 does not prescribe a uniform set of proficiency standards or assessment procedures for every district. The law is quite specific; it assigns each district the responsibility for establishing proficiency standards and related assessment procedures.

The law goes beyond simply requiring that an assessment be made. Student progress in the basic skills must be determined periodically so that those students who do not meet district-prescribed proficiency standards are identified early. Then school personnel must hold conferences with the students and their parents or guardians to identify individual problems and suggest actions that will help students reach the required levels of proficiency. How students are identified and how the district responds to the students' learning needs are local responsibilities. Techniques of assessment must be, without question, an important outgrowth of this legislation. These techniques must have a direct relationship to the local courses of study. But the assessment techniques cannot be allowed to define or control the process through which each district determines and implements its proficiency standards and procedures.

Meaning of Minimum Standards

One of the more perplexing questions posed by AB 3408 is this: What are minimum standards? Clearly, the intent of the law is to require the establishment of credible, measurable proficiency standards through which students demonstrate their skills in reading comprehension, writing, and computation. However, this requirement alone provides little guidance as to the general level of skills the Legislature intended to be measured and documented. The Department believes that it is the intent of the law to have the standards relate to the kind and level of skills necessary for students to function effectively in society. Standards should be established so that every student has a reasonable and realistic opportunity to achieve the required level of proficiency and receive a diploma by the end of grade twelve. However, the law allows school districts to establish "differential standards" for those students with "diagnosed learning disabilities."

It was the Legislature's intent to have districts make an early identification of students who may have problems in attaining certain levels of proficiency. The law requires that students' skills be assessed periodically and that supplementary instruction be made available for those who need it. The law also requires that the school, the student, and the student's parents be kept well informed of the student's progress toward meeting the required standards. The Department believes that AB 3408 means that no student or group of students should be excluded from earning diplomas; rather, the law intends to have school districts motivate and assist all students to attain at least minimum proficiency in the basic skills.

The law requires that through the assessment procedures each student's progress in achieving proficiency in the basic skills be measured; the law does not call for making comparisons of one student's achievement with group achievement or for contrasting the achievement of various groups of students. Specific recommendations regarding the assessment procedures are included in a later section of this guide.

Need for Credibility

If local proficiency standards are to be more than another educational "fad" or "panacea," they must be credible not only to educators but also to the students, parents, and communities that schools serve. This suggests that standards should be developed with community assistance and involvement.

The credibility of district standards ought to be built within each community through an open and continuous process of consensus on the skills that students must have to function in adult life. Many of the suggestions included in this guide reflect the importance of having broad community involvement in the process.

A district may choose to comply with the mandates of AB 3408 by adopting a set of reasonable proficiency standards, assessing student performance against those standards, and meeting the other provisions of this law. Some districts, on the other hand, may decide to see AB 3408 as a point of departure from which to move beyond the specific legal requirements toward, for example, a competency-based instructional program.

Because the law offers the opportunity to go beyond minimal compliance, the responses among districts are likely to vary. Comparisons among districts will inevitably be made. The law specifically provides for and encourages different local responses. If a district has established its proficiency standards and procedures through a local process of dialogue and consensus, the district should feel secure in the knowledge that its standards and procedures are useful and meaningful for its district and community.

Major responsibility for successful implementation of a basic skills assessment program will rest with the individual school site administrators. They must handle the details of administering the assessment program, interpreting the results, and planning any needed changes in curriculum. Therefore, districts should involve school site administrators in all phases of their decision-making process.

Major Logistical Challenge

Development of proficiency standards, assessment procedures, and supplementary instruction strategies by June, 1978, presents a major logistical challenge for most districts and school administrators. Clearly, establishing such a system in a very short period of time could easily overload the administrative resources of even the most capable district. Therefore, districts that have not yet begun, or have begun only recently, to implement the provisions of AB 3408 should start by adopting a limited number of requirements in each of the required skill areas for which they can develop manageable student testing and monitoring processes. As districts and their administrators gain more experience with these processes, additional requirements and assessment procedures can be easily added.

The usefulness of a district's proficiency standards depends largely on the credibility and feasibility of the assessment system. Having a broad base of participants involved in the decision-making process—board members, administrators, teachers, students, and parents—provides credibility; and when those involved clearly understand that the purpose of adopting proficiency standards is to improve the skills of students, the system becomes feasible. It is important then to keep in mind that the more complex the array of proficiency assessment procedures a district adopts, the more difficult it will be to foster an understanding of these procedures among the participants.

The law makes no express provision for the State Board of Education or the Department of Education to monitor district implementation of AB 3408. However, the Legislature has indicated a desire to follow up and examine district responses to the law. How or by whom this monitoring will be carried out is unknown at this time, but it is likely that some statewide analysis of the impact of the law will be conducted in the future.

III.

Guide for Implementing a Proficiency Assessment Program

A proficiency assessment program has an impact on all aspects of a school district's operation, and the best way for a district to develop a sound and acceptable program is to examine the current curriculum and instructional programs after considering the needs of the community. This section of the guide offers suggestions to school districts for identifying basic skills, developing assessment procedures, and setting standards of proficiency. It is divided into four main parts:

1. *Getting Organized.* This part outlines major district and individual school tasks, and it offers suggestions for developing a management plan and getting the community involved.
2. *Putting the Plan into Action.* A step-by-step framework for implementing the new proficiency assessment plan is presented in this part. It begins with a discussion of the goal setting process and concludes with a statement on evaluation. Two special features appear in this part of the guide—one on setting differential standards for students with diagnosed learning disabilities and one on assessing the proficiencies of limited English speaking and non-English speaking students.
3. *Working with the Assessment Data.* This part includes a sample plan for reporting and recording assessment information; e.g., test results and alternative instruction.
4. *Reporting the Assessment Information.* This part presents a discussion of district and individual school responsibilities for holding conferences with principals and teachers, parents, and pupils and for reporting to the school district governing board and the news media.

The implications for internal school organization, including counseling, staffing, curriculum development, and supplementary instruction, will be discussed in a future publication.

Getting Organized

Assessing student proficiencies in prescribed areas as a partial basis for granting high school diplomas is a new undertaking in most California school districts. The management of the pupil proficiency assessment process is critical to the development of a well-designed management plan. The plan should make clear not only who will be involved but also when and how they will be involved. Of course, the responsibility for providing overall direction through policy rests with the governing boards of school districts.

All school districts in California are faced with the legal mandate requiring pupil proficiency assessment. The law states that after June, 1980, no student shall receive a diploma of graduation from high school who has not met the standards of proficiency in basic skills; and the law also applies to those students who graduate at the end of the 1980 summer session. A wide range of options is available for determining the most appropriate response to the new law. Alternatives range from minimal compliance to the development of a complex system of assessment.

Developing a Management Plan

This section of the guide was designed to assist district and school site management personnel in identifying and organizing the key tasks that must be accomplished to meet the provisions of the new law. This section also suggests some factors that can be helpful in clarifying the tasks and calls attention to options that may be considered. The major management tasks include the following:

District Tasks

1. Establishing a budget
2. Reviewing courses of study to see that they meet the needs of students and include legally required subjects
3. Setting standards of proficiency in basic skills

4. Setting differential standards of proficiency for students with diagnosed learning disabilities
5. Designing alternatives to the required course of study
6. Providing information on graduation requirements to the public

Individual School Tasks

7. Measuring individual pupil progress at required intervals
8. Designing supplementary instruction for students who fail the proficiency test
9. Developing procedures for holding conferences with students who are performing below minimum levels of proficiency and with the parents or guardians of those students
10. Budgeting state funds that are available for notifying parents and students

Before the major management tasks can be undertaken, they must be clearly and specifically defined. In the following outline the mandated tasks are defined, and the pertinent management considerations are identified. After reviewing what needs to be done, district and school administrators can decide how, when, and by whom each task is to be accomplished. The administrators may also wish to consult Appendix I, which presents some sample management and operations plans that provide suggestions for management steps and timelines.

Major Management Tasks

District Tasks	Management Considerations for the District
1. Establish a budget.	No state funds are provided to districts for the implementation of student proficiency assessment except for the costs of notifying parents or guardians of the need to meet to discuss the results of a student's individual assessment and his or her need for additional instruction in the basic skills.
2. Review courses of study to see that they: a. Provide students with the skills and knowledge required for adult life. b. Prepare students for admission to colleges and universities. c. Provide for vocational training. d. Include English, American history, American government, mathematics, science, physical education, the completion of which shall be a requirement for graduation.	Current legislation places emphasis on the acquisition of skills and knowledge necessary for success in the world outside of high school. Techniques should be considered that will tell the school whether its students are gaining the necessary skills in their high school program; e.g., interviewing employers of graduates, sending questionnaires to former students. In prescribing separate courses of study, managers are cautioned to avoid the labeling and subsequent tracking of students. An alternative is to establish some courses required for all students while providing additional options for learners having particular career goals, such as admission to college or employment in a particular job. Districts should avoid establishing multiple sets of graduation requirements which could lead to a multiple diploma system; e.g., semester unit requirements, basic skill proficiencies, and so forth. Diplomas of graduation may not be differentiated on the basis of students' intellectual capacities. Standards of proficiency should be related to

Major Management Tasks (Continued)

District Tasks	Management Considerations for the District
	designated courses, with demonstrated proficiency as a condition for receiving course credit.
3. By June 1, 1978, set standards of proficiency in basic skills, including, but not necessarily limited to, reading comprehension, writing, and computation skills. The standards will be written so as to facilitate the assessment of individual achievement.	It is suggested that each district develop a master calendar of tasks that need to be accomplished. The calendar should specify the beginning date of the activity, the completion date, and the name of the person who will complete the activity. It may be wise to assign one administrator the responsibility for monitoring the activities to ensure that all work is proceeding in accordance with the plan. Managers are advised to limit initial activities to the development and assessment of significant skills in reading comprehension, writing, and computation. After districts set their initial standards of proficiency, they may then wish to expand further the scope of their assessment to challenge even the most talented and motivated students. Overemphasizing the minimum requirements may provide the public with a distorted perception of what most students can achieve and are achieving in the public schools. Differences in standards of proficiency between neighboring districts may be a cause of future problems. Communication links should be maintained with other districts within the geographic region.
4. May adopt differential standards of proficiency in basic skills for pupils with diagnosed learning disabilities.	For implementation purposes, the defining of diagnosed learning disabilities is the responsibility of local school districts. However, definitions should not be in direct conflict with the *California Master Plan for Special Education* and Public Law 94-142.
5. Adopt alternative means for students to complete the prescribed course of study, which may include practical demonstrations of skills and competencies, work experience or other outside school experience, interdisciplinary study, independent study, and credit earned at a postsecondary institution.	This requirement goes beyond the mere assessment of basic skills and provides districts the opportunities for innovation. Education and schooling are not synonymous. Learning takes place in many different environments, and students should be provided with a wide range of alternative means for completing course requirements. District and school administrators are encouraged to consider such alternatives as these: a. Independent study. Students can become involved in off-campus activities under the general supervision of a teacher. The school still receives its a.d.a. credit for these students. b. Veysey programs. Students are concurrently enrolled in high school and community col-

Major Management Tasks (Continued)

District Tasks	Management Considerations for the District
	lege courses, and credits earned may be counted towards both the associate in arts degree and the high school diploma. c. Enrollment in a regional occupation program or center (ROC/ROP). Students can enroll concurrently in a typical high school program and a regional occupational center or program. The development of alternatives requires districts and schools to plan, design, and adopt curricular programs for students for whom the regular course of study is inappropriate. Such programs need to be developed cooperatively with parents, administrators, teachers, and students to make sure that the alternative instruction is educationally sound and of direct relevance to the student and that it provides students with instruction they need to meet the locally adopted proficiency standards.
6. Make available to students, parents or guardians, and the public the requirements for graduation and the specified alternative modes for completing the prescribed course of study.	A plan for informing a district's many publics regarding graduation requirements and alternative means for the completion of those requirements is a major management responsibility. Appendix J contains a sample "note to students," which may be used to explain the program to students within the district. Press releases, notices sent home with pupils, pupil handbooks, inservice activities for principals and teachers, and presentations to organizations should be used on a regular basis. Do not neglect providing information to parents of elementary age pupils, particularly those with children in grades four through six. Districts that serve multiethnic populations should have materials prepared in the appropriate languages. Communications strategies should be designed to reach each public the district serves. Procedures that are effective in communicating with one segment of the community may not reach other important segments.

Individual School Tasks	Management Considerations for Schools
7. Take appropriate steps to measure individual student progress toward proficiency in basic skills. Assessments should be made once during the seventh through ninth grades and at least twice during the tenth through eleventh grades.	It may be useful to formulate "enroute" objectives for program monitoring purposes. Planning appropriate interventions for students who do not appear to be making sufficient progress toward achieving proficiency can be aided by the early identification of such students. Parental support

Major Management Tasks (Continued)

Individual School Tasks	Management Considerations for Schools
	may be gained more readily if a child's problems are identified in the elementary grades and conferences are scheduled early to discuss the problems and to develop appropriate courses of action. It is critical to achieve curriculum coordination among the elementary schools whose graduates attend the same high school. It is equally important to involve representatives of the elementary school districts in developing the proficiency assessment standards for the high schools.
8. Plan to provide instruction in basic skills for students who do not meet the established proficiency standards.	Schools with large numbers of students failing to meet proficiency standards may be faced with management, school organization, curriculum, and staff development problems that need to be considered in the planning process: a. It may be necessary to divert staff members from current assignments to teaching assignments in the basic skill areas. b. Many staff members may not have the training or skills required to teach students at the remedial level. c. Schools entitled to special funding, such as Elementary and Secondary Education Act, Title I, funds or educationally disadvantaged youth funds, may wish to consider appropriating some of these funds to assist eligible students in achieving higher levels of proficiency. d. Additional funds may be required for purchasing materials and specialized equipment for teaching basic skills.
9. Develop written procedures for requesting a conference with the students and the parents or guardians of those students who are not meeting district-prescribed standards in basic skills.	To ensure effective communication with the community, districts should prepare written notices and conduct conferences in the appropriate language.
10. Budget state funds available for notifying parents and students of the need to meet to discuss the results of assessments and to plan ways of helping the students. Develop procedures for verifying costs incurred in notifying students and parents that the students are not meeting the adopted standards of proficiency.	Guidelines will be forthcoming to clarify the reimbursement procedures. In the meantime, districts should begin to develop cost verification procedures.

Initiating Community Involvement

It is a basic tenet that the public schools belong to the people. A decision as critical as determining graduation requirements, including proficiency standards, needs community involvement to ensure acceptance and support.

The law does not specifically require the involvement of parents, administrators, teachers, and students in any process other than developing alternative means for students to complete the prescribed course of study. In fact, in planning for the implementation of student proficiency assessment, it would be possible for a district to involve only its professional staff. However, this approach seems inadvisable, for communities are more prone to accept change in their school systems if they are not only informed but also involved in the process.

Community involvement may be encouraged in many ways: interviewing community members, holding town hall or school site meetings, running advertisements in local newspapers or on television programs, and requesting write-in or call-in comments. In addition a school district may use more formal approaches such as sending questionnaires to the community or establishing advisory committees.

Forming an advisory committee. One way of securing community input for a program is to form an advisory committee. The committee should represent all segments of the school community, and such representation usually can be gained by having the governing board initiate requests for key persons to participate. The advisory committees should include representative teachers, students, counselors, administrators, parents, and community persons from labor, business, and industry.

In forming such a committee, consider not only those persons who currently serve the school as members of existing advisory groups but also those who have not been involved. Consider the various ethnic and socioeconomic groups in the population and employers who have a stake in the products of the school. Recent high school graduates, especially those holding entry level jobs, provide other useful perspectives. Representation from the elementary schools is essential. However, the size of any one committee should be kept small, preferably not more than 15 or 20 persons.

Since the committee members may not have all the background and expertise needed in a specific area, it may be appropriate to invite other persons to furnish resource information. Committee members may also wish to meet with other small groups to secure further information.

Outlining the role and function of the committee. After selecting the members of the advisory committee, the next step is to outline its role and function. Its various responsibilities may be (1) providing information; (2) identifying options; (3) recommending alternatives; and (4) reviewing and responding to decisions.

A number of basic decisions must be made as districts begin to develop proficiency assessment standards. Advisory committees can help districts answer the questions that need to be answered to make such decisions:

1. What are basic skills?
2. What is proficiency?
3. How should proficiencies be assessed?
4. How should standards be set?
5. Where does curriculum need to be revised?

Advisory committees can use a variety of methods to help districts answer these questions, including questionnaires and telephone surveys.

Using questionnaires to gather information. Questionnaires provide an alternative to, or assistance for, the advisory committee approach and are especially suitable for gathering baseline information on community preferences. The answers given for 10 to 15 well-written questions could identify the levels of competency the community believes its high school graduates should achieve. Information from the questionnaire could then be integrated with information from the school staff, faculty, and student population. Materials to help districts develop such a questionnaire are contained in Appendix H.

Putting the Plan into Action

Implementing proficiency assessment begins with an examination of the district's educational philosophy and curriculum. A planning process should follow in which the district interrelates its purposes of instruction and the curriculum. A sequence of integrated curriculum content depends upon the development of (1) a philosophy or statement of purpose from which goals are generated; (2) objectives which enable staff to know what students are to learn and which activities provide appropriate experiences for student learning; and (3) assessment instruments to provide feedback regarding how much and how well the students have learned.

Setting Goals and Achieving Consensus

District goals should be developed or reviewed to ensure that the material covered in the assessment has been integrated into the curriculum. The goals should outline instructional scope and sequence so that districts can develop program objectives.

The basic elements of the goal development-selection process follow:

1. *Goal criteria.* Determining and agreeing upon a set of goals.
2. *Statement development.* Formulating the specific wording of the goal statements. This process can be one of revising a given set of statements or creating new statements. The key issues are who should be involved and how.
3. *Statement refinement.* Compiling a usable list of goals.
4. *Goal priority.* Assigning a priority rating to each goal statement.
5. *Consensus.* Obtaining final agreement on goal priorities.
6. *Adoption.* Securing formal board acceptance of the goal statements.

Student attainment of certain levels of proficiency is a shared responsibility. The professional staff must clearly state what students are to learn and provide adequate resources in a structure that will facilitate learning. The students must realize that they shoulder the responsibility for their own learning and must put forth the necessary effort. Parents must demonstrate a value for education and encourage their children to strive toward proficiency in the basic skills.

Developing and Selecting Instructional Objectives

While the educational philosophy and goals give direction to district instructional programs, the objectives state generally who is to learn what and under what conditions. The conditions may be categorically or individually defined. When students are taking a general course of study, all the students in the course may operate under similar conditions. A contrasting situation would occur when an individual is working on an independent study project. In addition to considering the typical elements of an objective when writing courses of study, staffs will want to consider whether the objectives have sufficient value, scope, and sensitivity to instruction:

- ○ *Value.* Proficiencies represent skills which the student can apply immediately upon graduation.
- ○ *Scope.* Proficiencies include previously learned skills and concepts. Each proficiency should be clearly defined, so that the sampling of learner attainments will result in a valid assessment of that person's skills.
- ○ *Sensitivity to instruction.* Proficiency assessment should be related to the course of study.

Proficiency assessment may be related to specific courses of study in three basic ways:

1. *Proficiency assessment may be designed to fit the course of study.* The course of study would remain basically unchanged, and the proficiency assessment would be designed around the course of study and would occur at the end of instruction.
2. *The course of study may be designed to fit proficiency assessment.* Assessment would occur at the end of instruction.
3. *The course of study and the proficiency assessment could be combined.* Assessment would be conducted on an ongoing basis. Under such a plan successful completion of the course would also mean the student had attained the required level of proficiency.

Contemporary schools serve a diverse student population. These students learn through different modes and respond to instruction in varying ways. It is expected that a school will provide alternative learning opportunities to students, as needed, to assist them in completing prescribed courses of study. Local districts should examine available school and community resources. By matching available instructional resources to proficiencies, school personnel may be better able to select appropriate means of instruction for particular students.

Pupil assessment can identify learnings at a variety of levels. For example, one district may choose to assess only the knowledge that students have acquired while completing a course of study, while another district may assess the ability of students to apply learnings to understand or evaluate events which influence their lives. Since the ability to recall information does not mean that a student will be able to understand or evaluate that information, districts are encouraged to assess student learning at higher levels of cognitive functioning as well as assessing the student's knowledge base. For example, students may be able to use reading rules to say words that appear on paper. At a higher level, the students may be able to answer questions about what they have read. A higher level still may be the ability to act on something they have read or to determine whether the passage conveys a message that is important or valuable to them.

Developing a Rationale

The district's rationale for requiring proficiencies in the basic skills will determine the standards or levels of proficiency to be required of its students. In other words, districts may choose a minimum level which requires students to demonstrate knowledge of the basic building blocks leading to future development of basic skills; or districts may choose a higher level or standard which requires their students to demonstrate a level of proficiency in the basic skills equal to that of an adult successfully performing a similar life-role task.

Defining Basic Skills

A school district must arrive at its own definition of basic skills to include at least reading comprehension, writing, and computation. Each district has the additional task of further defining these skills. For example, reading comprehension may be defined as a continuum of processes ranging from decoding words through critical thinking. A district will need to specify these processes and identify ones essential to "basic" reading comprehension. A district will also need to decide the context in which these reading processes will be assessed.

In its most basic form, computation means being able to read, write, and comprehend numbers. Computation also involves manipulating numbers in order to perform mathematical operations as well as using these operations in a variety of contexts. A district will need to decide which of these processes constitutes competency in computation.

Defining competency in writing again involves identifying a continuum of processes from the mechanics of spelling through written composition. In each skill area a district will need to define the continuum of processes, decide upon the critical elements of "minimum proficiency," and set reasonable standards for student performance. For further assistance in defining and decision making for each of the designated skills, please see the *Resource Catalog* in this guide.

Defining Reasonable Expectations

Setting student proficiency standards should be done with deliberation and care. District staffs need to consider the variety of expectations people bring to the process. Students have expectations based on their personal goals and aspirations which will be directly affected by whether or not they attain the proficiency levels set by the district.

Various groups within the community have different expectations related to student proficiency. Future employers, such as business, industry, labor, and governmental agencies, want assurance that their future employees have acquired the basic skills. Colleges, universities, and trade and technical training centers can plan more effective courses of study if they have assurance that students coming to them are able to read with understanding, communicate effectively, and compute accurately.

Two sources of information that a district will find useful in defining reasonable expectations are (1) information based upon general community expectations, including a review of literature and national norms; and (2) information based upon local student performance data, including a review of local group testing, teacher information, and state assessment results. Ideally, a district will consider both sources in defining reasonable expectations of student performance.

Determining Assessment Procedures

Tests, structured observations, work samples, or other forms of instrumentation used to gather data on student proficiencies can make up the district's assessment procedures. These assessment procedures provide the data from which judgments about student proficiency can be made. In some circumstances only one measure of student performance may be needed to verify a student's level of proficiency. In other circumstances multiple measures of student performance may be necessary to verify the same proficiency.

A concept that is embodied in the notion of "student assessment" is this: Assessment results must be usable for preparing an appropriate instructional program for each student.

It is of little value in educational program planning to know whether a student is relatively better than 36 percent of the students of a given age or grade level. It is of more value to know that a student has difficulty in computation because of a misunderstanding of place value. Accordingly, districts are encouraged to examine carefully the types of instruments that they may develop or select to use in their proficiency assessment procedures. They should consider how useful the resulting information will be for planning educational activities, strategies, and individual programs for particular students.

Selecting Assessment Items and Exercises

The most typical assessment instrument is a multiple-choice or true-false test. Ready availability of computerized scoring services has made this format most attractive. It is also the most efficient way of getting a detailed analysis of student performance within a school, district, or state. It is most useful for questions requiring a fine line discrimination among closely related options, only one of which is correct. For example, the student may be asked to select the serial number of a particular part from a listing of similar parts, all having the same number of digits in their serial numbers. However, using the multiple-choice or true-false test may not always be the most appropriate way to determine each individual's proficiency in the basic skills. The most accurate results are obtained from assessments based on more than just one method.

In designing assessment procedures, school districts should examine the three basic models developed by the State Department of Education to be used for generating assessment items and exercises (see Appendix A):

1. *School context model.* This model has traditionally been used in schools. To assess computation, the student may be expected to solve addition problems presented in word or numeral form. Reading comprehension may be assessed by asking questions directly related to the content of a reading passage. Writing may be assessed by recognizing spelling or punctuation errors or similar isolated aspects of writing. The student is asked to select the correct answer from a list of possible answers.
2. *Functional transfer model.* The functional model is used to assess whether students can transfer learning from the classroom to life situations. Functional proficiencies can be assessed in the school setting. For example, to assess addition, the student may be required to determine the balance owed on a billing invoice listing two or more item entries. Reading comprehension could be assessed by requiring the student to read a product label and then answer questions pertaining to the directions. Writing could be assessed by having the student write a letter requesting an employment application.
3. *Applied performance model.* This form of testing is currently receiving a great deal of attention, especially in the field of adult education. Applied performance tests are designed to measure proficiencies in the most direct manner possible. For example, to assess proficiency in computation, the student may be required to make correct change while operating a cash register in a local business.

Common techniques used in the classroom can also be used as assessment items and exercises. Districts may wish to include some of the following in their assessment procedures: (1) essay questions; (2) sentence completion; (3) matching items; (4) short answer; (5) computational problems; (6) math story problems; (7) math-science formula problems; (8) problems involving editing or correcting mistakes in mechanics of expression; and (9) spelling tests requiring students to spell words correctly that have been presented orally.

Making Enroute and Final Assessments

The value of assessing student proficiency rests in making certain that individuals acquire the knowledge and skills they need to function effectively in contemporary society. Enroute assessment of student proficiencies serves to verify the students' current levels of proficiency and to monitor students' general learning progress. If it appears during enroute assessment that some students are not progressing at the proper rate, it is to their advantage to be identified early so that their instructional program can be modified.

A special problem presents itself when assessing the proficiencies of limited English speaking (LES) and non-English-speaking (NES) students. If the enroute assessment is performed in English, the students will obviously perform poorly. An enroute assessment in the students' native language will more accurately reflect their true level of proficiency in basic skills. This also enables school districts to determine the appropriate instructional changes that need to be made for students with problems in the use of their native language. Such intervention should prepare students to pass the final assessment in English.

Students who pass the final assessment are ready for higher levels of learning. Such students might then be matched with a community college or work experience program which would meet their particular needs.

Proficiency Assessment for Limited English Speaking and Non-English Speaking Students

One of the major concerns facing school districts when implementing the provisions of Assembly Bill 3408, as amended by AB 65, is the effect of these new laws on limited English speaking (LES) and non-English speaking (NES) students. As amended, Education Code Section 51216 now reads, in part:

> . . . the governing board of each district . . . shall take appropriate steps to ensure that individual pupil progress towards proficiency in basic skills is assessed in the English language during the 4th through 6th grade experience, once during the 7th through 9th grade experience, and twice during the 10th through 11th grade experience. . . . Nothing in this section shall preclude any district from conducting an assessment of any pupil in English and in the native language of such pupil.

In other words, the assessment of basic skills must be administered in the English language, but it may also be administered in the students' native language. The implication is clear: in order to graduate from high school, LES/NES students will have to pass the final assessment of their proficiencies in the basic skills in the English language. However, enroute assessment may be conducted in the LES/NES students' native language. In addition the enroute assessment in the students' native language may be used to assess the students' level of English language fluency as well.

Special Concerns for LES/NES Students

Requiring LES/NES students to pass an English language basic skills assessment raises several concerns:

- When LES/NES students are faced with an examination in the English language and the prospects of sure failure, they may simply drop out of school.
- LES/NES students may be channeled into remedial programs, which could result in a return to tracking systems.
- The goal of language maintenance or language revitalization may be assigned a lower priority than the goal of passing the proficiency tests.
- Communities with small numbers of LES/NES students may not have the resources or desire to provide these students with an equitable opportunity to prepare for the proficiency assessments in the English language.
- Communities with large numbers of LES/NES students may set proficiency standards low to avoid the negative criticism their districts might receive by setting standards that large numbers of LES/NES students could not reach.

In addition to the concerns just cited, current bilingual programs are often modeled after, and therefore contain some of the negative characteristics of, the mainstream program. For example, LES/NES students are often misled or confused as to what their actual levels of performance and skills are. This happens easily because the students and those who are concerned with the students' progress may be preoccupied with the students' being able to pass courses and to graduate from school. As a result, they may neglect to measure the students' actual level of education and skills development.

Dornbush and Massey, in their research in the San Francisco schools, discovered that contrary to some beliefs, poor and minority children are constantly being told that they are doing well when they are not; that their work is satisfactory when it is not; and that they are progressing when they are not. Not only are the students deluded but so are their parents. Consequently, the public often sees that minority and poor students with passing grades cannot function in work or college.

A Need for Definitions

The benchmarks for success in school—the indicators of progress or of achievement—have not been defined, made explicit, or communicated to the limited English speaking and non-English speaking students or their families. Not only are they not known by the students, they may not be generally known or agreed upon by the school district's staff.

Often there are no specific goals for which both students and staff can be held accountable by the school community. Assessment of proficiency in the basic skills, as mandated by AB 3408 (and amended by AB 65), in concert with the definition of "exit criteria" mandated by the Bilingual-Bicultural Act (AB 1329) have the potential for providing such focus and accountability. Coordination and articulation of the two sets of criteria are essential so that the purposes of both legislative acts converge.

Proficiency assessments in English may prove beneficial to limited and non-English speaking students. Some programs for these students have vaguely defined goals, sometimes even contradictory goals, and the students' progress and benefits from individual programs are difficult to measure or observe. However, well-developed proficiency assessments could provide the data needed for developing definite, clear objectives that would help provide form, purpose, and direction to those bilingual programs that have not established sound objectives. This could be particularly true if the proficiency assessments identify the competencies students must have to function in the social, economic, vocational, and political spheres of the community. The goals of these programs should be much broader than those represented by the proficiency tests, but the tests could provide a minimal core of goals. Continual and accurate feedback to the students and their parents on the students' progress toward these goals is essential.

Implementation Procedures for Basic Skills Assessment

Districts should use special care when planning their assessment procedures for LES/NES students. If the assessment procedures are not well planned, the number of LES/NES students disqualified from graduation could increase. It is important that some baseline data be generated in the next two years. In this way, after their assessment programs are implemented, districts could determine any decrease or increase in the percentage of LES/NES students who do not remain in school long enough to graduate. In addition districts may wish to do the following:

- Develop translated forms of the diagnostic instruments for use in the enroute assessments.
- Incorporate skills, content, and concepts of the proficiency examination into current bilingual and English as a second language (ESL) programs. This process should not dominate or displace the important goals of bilingual education. The skills contained in the proficiency tests should be a universal component of instruction.
- Administer bilingual diagnostic tests to limited and non-English speaking students as early in school as possible; then administer them at subsequent intervals to measure student progress.
- Begin instruction as soon as possible in the areas of need, as indicated for individual students by the diagnostic tests.
- In the regular instructional program, use English vocabulary and language that is parallel to the language used in items in the proficiency test. For practice as well as for the purpose of assessing the interim progress of students, allow students to take English and translated tests which parallel the official proficiency tests.
- Provide bilingual test proctors to help students understand key terms, phrases, and words.

The preceding recommendations are compatible with current bilingual education models. Early diagnosis in the students' dominant language should identify any discrepancies between the students' actual skill levels and those disclosed by the proficiency test. If discrepancies exist, the students can concentrate on the skills in which they are found deficient, studying them in their dominant language while simultaneously learning the English language. Phrased another way, early diagnosis and remediation in the dominant language, accompanied by English instruction, are consistent with the principles of bilingual instruction, as set forth in AB 1329.

Further Considerations for LES/NES Students

Early diagnosis and remediation are important because students will vary in the amount of preparation they will need to pass the proficiency tests. The amount of preparation time students need may vary, as follows:

- Students who demonstrate proficiency at or above the standards of the test in their own language will probably require at least a year's preparation in English instruction to pass the tests and function in model bilingual programs.
- Students who do not demonstrate age-level expected skills in their native language will probably take longer to pass proficiency examinations in English than those who demonstrate expected skills. Even if some students speak a little English, their other basic skills may not develop as rapidly as they should while they are learning the new language. Their needs are for remediation in their dominant language and continued instruction in English.
- Many Spanish-surnamed students who speak little, if any, Spanish and who would be diagnosed as below expected levels of proficiency are frequently found in high school bilingual programs. It should not be forgotten that their dominant language is English and that their primary language of instruction for remediation of their skills should be English. For these students instruction in the language of their heritage is for the purpose of revitalizing it. But instruction in Spanish for the Spanish-surnamed student who is English dominant should not, particularly at the outset, be expected to yield substantial gains in basic skill development.
- Early diagnosis in the dominant language and continual attention to preparation in the skills to be tested would do much to counteract discouragement and premature departure from school.

Bilingual programs are different from traditional remedial classes in important ways. They include, or should include, students at all levels of ability. They can generate supportive and motivating feelings of community not possible in the typical remedial program. Moreover, because these programs deal with more than remediation of skills, skill development can be incorporated into a rich curricular context of the students' cultural heritage.

Conferences with Students and Parents

Recently added Education Code Section 51216 requires that a conference be arranged by the school for students who fail the proficiency tests. The principal or his or her delegate, a teacher who knows the student, the student, and the parent are required to be present. The purpose of such a conference is to devise an educational plan for the student that will help that student reach the level of proficiency required by the district. Concern has been expressed by parents that they may not be able to understand the technical aspects of the discussion to participate effectively in the conference. Parents may also be concerned that they will not have the expertise to evaluate the appropriateness or quality of the educational plan designed by educators. It is strongly recommended that parents who so desire be permitted to bring to the conference someone whose knowledge of education they trust. Further, the educational plan should identify indicators of improvement in the deficient areas that both parents and students can observe at home. Tutoring assistance should be provided, and the students should be permitted to retake the proficiency tests when they believe they are ready.

Bilingual students will profit if graduation requirements are tied to bilingual program objectives. Additionally, the bilingual education program undoubtedly offers the best vehicle for LES/NES students to gain the skills and knowledge to pass proficiency tests and to be assured of leaving school with at least minimal functional skills.

Developing Assessment Procedures

Districts should be careful at the outset to develop reasonable assessment procedures that will not overextend the resources of the professional staff. For example, many small school districts will be restricted by the level of funding available for computer scoring or additional professional help.

Because the test format and types of items will affect both scoring procedures and interpretations of findings, a good "blueprint" or set of instrument specifications is needed before beginning construction of an assessment instrument. When the instrument specifications are being prepared, it is advisable to include examples of desired item types and detailed descriptions of question and answer characteristics. As assessment items are developed, attention should be paid to the details of test analysis. To prevent errors and to verify the usefulness of the test specifications, the specifications should be reviewed by those who will be writing the questions before test development begins.

Districts interested in constructing their own instruments are encouraged to read carefully the material in appendixes A, B, C, and D.

Selecting Assessment Instruments

Some school districts may prefer to select assessment instruments from among available resources rather than construct their own. Different types of instruments are attractive to districts for varying reasons. However, regardless of the types of instruments a district decides to use, it is essential that those selected pertain directly to, and accurately assess, student performance in the local courses of study.

Resources from which instruments may be selected are (1) norm-referenced measures accompanied by a complete set of objectives the test was designed to measure; (2) criterion-referenced instruments, with corresponding objectives specified; (3) "pools" of validated items which are matched to the test specifications prepared by a district. However, regardless of the resources used, the test must assess student performance in the local curricula.

Norm-referenced and criterion-referenced measures may differ widely or be identical in all important aspects except application. Both may have norms, may indicate a performance standard to verify mastery, and may have standardized administration and scoring procedures.

The differences between norm-referenced and criterion-referenced measures have sometimes been exaggerated for purposes of illustration. School districts should remember that norm-referenced measures are developed for the purpose of relating an individual's performance on that instrument to the performance of others, the norming group. Conversely, criterion-referenced measures are developed to determine whether an individual can perform acceptably when compared to a preestablished standard.

Item pools are collections of items and exercises that have been constructed from instrument specifications. Districts that have specifications based on their learner objectives can match their specifications with those for which items and exercises already have been prepared and "pooled." Items and exercises from the pool are then placed in an assessment format for administration. Ideally, each item and exercise that has been placed in the pool has been validated and accompanied by a statistical history of how well students have performed on it.

Reviewing and Pretesting Assessment Procedures

Before implementing a tryout, field test, or pretest of assessment procedures, the items and exercises and the mechanics of the assessment procedures should be thoroughly reviewed to detect errors and faulty procedures (see Appendix C). The purpose of pretesting the assessment procedures are fourfold:

1. To organize the distribution and collection of assessment materials so that all persons involved directly in the assessment process will have a firm understanding of their roles and functions in the process and have the appropriate materials at the appropriate time
2. To clarify directions for the administration of the assessment so that students have a clear understanding of how they are to respond to proficiency assessment items and exercises
3. To identify faulty items and exercises so that they may be revised or eliminated from assessment procedures
4. To gather student performance information that will enable districts to initially "set" reasonable passing levels on their proficiency standards

The pretesting of proficiency assessment measures should parallel or closely imitate the actual procedures planned. It follows that if student sampling is employed for pretesting, students selected should be representative of those students who will eventually be affected by the assessment procedures.

Assessment procedures should be continually reviewed and refined. Such a review and refinement process will help ensure the implementation of credible assessment procedures and will help detect and eliminate unfair biases. Assessment results will then be more usable and enabling to student growth rather than disabling and punitive.

Safeguards and precautions are recommended for setting a good group testing situation (see Appendix D). These provisions include the counseling and preparation of students for assessment as well as presenting the testing in a way that encourages each student's best performance.

Setting Standards of Proficiency

Although setting standards of proficiency is a subjective process, the standards should not be set in an arbitrary or capricious manner. They should be based on data and set as responsibly as possible. It is a concern that students who have not attained the proficiency standards set by the district may be misclassified as being proficient and, conversely, those pupils who have attained the proficiency standards of the district might be misclassified as having not attained the standards. By utilizing the concepts of assessment as a process for making sound judgments based on data, misclassification may be reduced.

There is a legitimate concern that setting minimum proficiency standards will result in lowered achievement becoming the encouraged and typical goal. This need not happen. The student assessment process can be established for all levels of student proficiency, not just the minimal skills level. Throughout all phases of schooling, students should be given information about their educational growth.

When student performance is measured against a standard, a school district can more easily determine which students have and which students have not demonstrated proficiency. Because these standards play an important role in determining which students are eligible to graduate, it is essential that they be set carefully.

When setting standards, districts should keep in mind that the expectations of the various school audiences may differ on the appropriate level of skill attainment. Proficiency standards should reflect the concerns of various audiences.

Students will be better motivated to achieve the prescribed standards if they are involved in setting the standards and have advance knowledge of what is expected of them. When disparity of expectations among the audiences exists and the students are aware of this disparity, the possibility of lowered student motivation exists. In addition there is the possibility of reduced support for the schools' programs by the different groups. Therefore, it is important for districts to identify and understand the expectations of the audiences in their district before setting standards of student proficiency.

Setting Differential Standards

Local school district governing boards may set differential standards for students with diagnosed learning disabilities. By permitting local boards to set standards for students who have been diagnosed as having learning disabilities, several responsibilities are placed on local districts:

1. Defining the term *diagnosed learning disabilities* consistent with the *California Master Plan for Special Education*
2. Setting and justifying standards for learning disabled students which are different from the standards set for other students
3. Complying with existing law, rules, and regulations which affect students who have particular learning disabilities

Defining a diagnosed learning disability. Diagnosed learning disability is a clinical term used in special education. The term diagnosis implies an identification of causal factors which interfere with a student's learning. The term disability implies a persistent and irreversible state. There is acknowledged difficulty in differentiating between the student who has difficulty learning and the learning disabled child.

The assessment of students with diagnosed learning disabilities should be diagnostic and individualized. When the students' proficiencies are assessed, such variables as previous educational progress and methods of instruction, student ability, and total school behavior should be examined to determine how better to assist the students to learn. An instructional plan that includes socialization instruction and vocational planning should be prepared as a result of the assessment.

Some students initially diagnosed as learning disabled have learning problems which are subject to change. For example, the neurological development of children varies. Students experiencing delayed development often require different instructional procedures, but the uneven growth pattern may not necessarily have a lasting, disabling effect on the students. Appropriate instructional modifications should enable such students to adapt and develop as their abilities evolve. As the students mature, the learning difficulties may diminish, allowing the students to function adequately without further supplemental instruction.

Local school boards can influence the student appraisal process in their districts through their definition of diagnosed learning disability. This guide encourages the use of a definition which is consistent with the *California Master Plan for Special Education.*

Setting differential standards for learning disabled students. Setting differential standards is a potentially sensitive practice. It is important that the various school publics understand how any student will be classified as having a learning disability. They must also understand the process that will be employed to set proficiency standards for the student having a diagnosed learning disability. If these two processes are not thoroughly understood, some may consider the local governing board to be acting in an arbitrary and capricious manner.

The process for identifying students who have learning disabilities is described in existing laws, rules, and regulations. The *California Master Plan for Special Education* is relatively clear in this regard. It is recommended that the district committee which has responsibility to develop an individual student's plan also describe the performance standards in basic skills for which the student may receive a diploma.

It should be reemphasized that assessment of student performance may be based on multiple criteria, not just a test score. Committee members responsible for developing individual education plans should understand the definition of the term *assessment* as used in this guide. For each student, the committee should prescribe attainable standards which enhance learning.

It is recommended that student proficiency standards for learning disabled students be individually set rather than set for the group as a whole.

Complying with laws and regulations which affect learning disabled students. Existing law related to students having diagnosed learning disabilities encourages district personnel to use appropriate resources to assist these students to achieve their potential. The philosophy contained in this guide is consistent with that view.

Evaluating Proficiency Assessment

School districts will need to determine the long-range effectiveness of their proficiency assessment. Follow-up studies of students who have earned a high school diploma will:

1. Identify the strengths and weaknesses of the educational program.
2. Illustrate how well graduates perform in adult society.
3. Suggest areas in which curriculum may need to be modified.

Complete discussions of the broad areas of curriculum reform and proficiency assessment evaluation are beyond the scope and design of this guide, but those areas will be treated in future publications.

Working with the Assessment Data

A student proficiency assessment system will produce information school audiences will need to know. Students will need to know how well they are progressing. Parents and teachers will need to know the information so that they can give assistance to students who need the help. Local school district governing boards will need assessment information in reviewing the effects of policies. Staff at all levels will need assessment information to revise curricula.

Presenting assessment information to various audiences is a matter that warrants careful attention. Districts and schools should consider which audiences will request assessment information and determine in what detail and form the information can best be communicated.

Districts should develop a plan which shows what information will be kept, by whom, and to whom it will be reported (see the accompanying sample plan entitled the Overall Plan for Managing Student Assessment Information).

The assessment process should enable principals and teachers to identify students who are not likely to attain the district-prescribed standards in the basic skills. Education Code Section 51216 requires assessment of student progress toward proficiency in the basic skills at least once in grades seven through nine, and at least twice in grades ten through eleven.

The use of data from student proficiency assessments will vary from district to district. Some districts will choose only to record whether or not students attained the prescribed proficiency standards for graduation. Other districts, in addition, may choose to use the data to monitor student progress, validate assessment instruments and procedures, and evaluate curriculum adequacy.

Overall Plan for Managing Pupil Assessment Information

	Information to be reported (to)			Recordkeeping (by)		
Topic	**Student**	**Parent**	**Community and school board**	**Teachers**	**Principal's designee; e.g., counselor**	**Administrator**
Standards of proficiency	1. Content of law 2. Skill areas to be covered 3. Proficiency levels	1. Content of law 2. Skill areas to be covered 3. Proficiency levels	1. Content of law 2. Skill areas to be covered 3. Proficiency levels	1. Monitoring of each student's progress in reaching required levels of proficiency	1. Standards to be covered in each department and course 2. Students who have and have not attained proficiency levels 3. Students on special projects	1. Criteria for proficiency assessment 2. Proficiencies to be included
Assessments	4. Frequency 5. Date and time 6. Individual results	4. Frequency 5. Date and time 6. Individual results	4. Frequency 5. Date and time 6. Group results	2. Methods of evaluation 3. Specific date and time 4. Results	4. Methods of assessment 5. Individual student results	3. Monitoring of all assessments 4. Statistical data for schools and districts
Conferences	7. Notification of conference 8. Status 9. Identification of alternatives	7. Letter announcing conference 8. Follow-up telephone call	7. Formative and summative data on conferences 8. Student and parent reaction	5. Participation in conferences	6. File copy of conference notifications 7. Follow-up phone calls 8. Date and time of conferences 9. File copies of decisions made at conferences, including alternative courses selected 10. Special projects	5. Verification or compliance 6. Provisions for alternatives
Instructional processes; alternatives	10. Courses available 11. Alternatives available	9. Courses available 10. Alternatives available	9. Courses available 10. Alternatives available	6. Standards to be covered in their course and department 7. Course alternatives	11. Standards to be covered in each course and department 12. Students on special projects 13. Alternatives to regular program	7. Courses of study and alternatives

Limited resources available to districts will necessarily impose some restrictions. The hand recording of data will be the best approach in some small school districts, while computer-based monitoring assistance will be appropriate for others. Samples of forms that have been helpful to districts in recording proficiency assessment data appear in Appendix E.

Reporting the Assessment Information

Assessment results will be useful to students, parents or guardians, and teachers for following the students' progress in skill attainment and to teachers, administrators, and school board members in analyzing curriculum.

If students are not meeting district-prescribed standards in the basic skills, school personnel are obligated by law to inform the students and their parents or guardians of this fact.

It may be useful for school districts to design a single recordkeeping system for keeping track of the conferences held with parents and students. A sample form that districts may modify for their own use may be found in Appendix F.

Informing the Governing Board

Local school district governing boards have the responsibility for establishing policies that result in high quality instruction in their districts. School administrators should present timely information regarding results of student proficiency assessments for use by board members in making policy decisions. Those responsible for curriculum implementation in the district should be prepared to explain fluctuations or irregularities in the data.

Informing the Public

Providing proficiency assessment information to the various publics that a district serves is of paramount importance. The public should be kept informed of all significant developments. Lack of information or, even worse, misinformation will impede the successful implementation of a district's assessment procedures.

Reporters and news editors will decide what information they will present to their readers, viewers, and listeners. Therefore, it serves the district's interest to provide information which fills the news media's needs and specifications. The news media may be most interested in:

- How assessing proficiencies will affect the students' experiences
- How proficiency assessment benefits students
- What makes this a new program
- What the new law requires of parents
- How much the implementation of assessment procedures will cost

The news media which serve the community in a district often serve the communities of other districts. The greater the number of school district communities the media cover, the greater the problem of reporting accurately and thoroughly how each district in the area will implement assessment procedures.

Since the law provides for each district to adopt its own standards of proficiency, these standards are likely to vary, even among neighboring districts. The public will probably question this. It is critically important that districts be able to explain that each district establishes standards based on local needs and goals, which vary from district to district.

Contacting the News Media

To establish good relations with the news media, provide all news media services with equal information and contacts, preferably all at the same time. If some of the media cover other schools or districts, arrange for coordination so that the reporters and editors are not deluged with the same information.

Consider coordinating all information that pertains to all districts through one person, preferably a school public information specialist. Each district, however, must contact the news media on its own to release information that is unique to that district. If the district does not have a school public relations specialist, consider asking someone with experience and an interest in news media, either staff person or citizen volunteer, to coordinate information on proficiency assessment and other newsworthy activities. The media contact person should:

1. Offer to meet personally with the reporter or news editor of the local newspapers and the radio and television stations. Explain briefly the impact of proficiency assessment on local students and parents.
2. Provide each news medium with a copy of the "Background Information" sheet and the district's version of one of the sample news releases (see Appendix G). News releases should be typed double spaced to allow for editorial revisions.

3. Review with the reporters or news editors the implementation efforts the district will be taking; then ask at what points they want information provided.
4. Ask radio and television stations if there are interview shows or talk shows which would lend themselves to a discussion of assessing basic skills.
5. If the reporters or news editors offer suggestions on how to make the information more newsworthy or more interesting, follow their suggestions. Each may have different requirements. Furthermore, because they know their audience, following their suggestions will probably result in greater coverage.
6. Suggest taking a picture of students being assessed. Most news and photo desks will prefer to take their own pictures, but if they ask you to provide one, it should be a black and white glossy (unless they specifically request color); 8 x 10 inches; the subjects should be close enough to show their facial features; the subjects should be actively engaged in testing, not posing or looking at the camera. If individual students can be identified, those students' parents should sign a photographic release form before the photographs are submitted for publication.
7. Offer to make available several students for an interview after they are assessed if it would interest the reporter or editor.
8. If reporters or editors come up with ideas for a feature story, cooperate as fully as possible by providing the services and information needed to fulfill their requests.

News is generally made up of actions or occurrences, rather than of concepts. Therefore, the news media probably will not be interested until specific things happen regarding implementation of assessment procedures in the district, such as the following:

1. When school begins, the news media will be interested in a general description of the proficiency tests and what happens if students fail.
2. When the school district governing board plans to adopt recommended standards of proficiency, the news media may want to report the upcoming meeting.
3. When basic skills are being assessed, the news media will be interested in the results, such as the percent of students who pass.
4. When the school district governing board adopts special programs to assist students who failed the assessment, the news media may be interested in the content of the programs.
5. When the school district governing board adopts alternative means for students to fulfill graduation requirements, the news media may want to know what the alternatives are.

Three sample news releases are provided in Appendix G. The first is background information produced for the reporter or editor. The second is a sample news release for print media, and the third is a sample news release for the electronic media.

Appendix A Sample Assessment Exercises Manuals

When the *Technical Assistance Guide for Proficiency Assessment* was first published in 1977, the Department planned to add sample assessment items as Appendix A ("Sample Assessment Exercises and Test Questions"). However, after the development of the sample items had begun, it became apparent that the quantity of material necessary to provide an adequate range of assessment items with accompanying item specifications and performance statistics could not be accommodated in the space available in the *Technical Assistance Guide.* As a result, the Department produced four additional volumes, the elementary and secondary editions of *Sample Assessment Exercises Manual for Proficiency Assessment (SAEM),* volumes I and II. Volume I contains the item specifications and sample assessment items. Volume II contains statistics that indicate how students in grades four and six (elementary edition) and grades seven, nine, and eleven (secondary edition) performed on those items.

In Volume I of the *Sample Assessment Exercises Manual,* items are presented in the following models: the school context model and functional transfer model in the elementary edition and the school context model, functional transfer model, and applied performance model in the secondary edition. In both editions the school context model is divided into sections on reading, writing, and math. The school context model has traditionally been used in the school setting to test discrete skills in isolation. This model is in contrast to the functional transfer and applied performance models, which may be used to test two or more skills simultaneously. Therefore, depending on how a district designs its assessment, appropriate items may be selected from any single model or from a combination of models. The curricular emphasis in most schools, however, is currently more "aligned" with the school context model than with the functional transfer model or applied performance model. For additional information on each of these models, the reader is encouraged to read in Volume I of *SAEM* the narrative preceding the sample items in each category and the section entitled "How to Use SAEM."

In Volume II of the *Sample Assessment Exercises Manual* are sections on field testing, use of item statistics, and item statistics for the multiple-choice items in Volume I. The item specifications and items (Volume I) and the item statistics (Volume II) should be used together to create or select those items best suited to a district's assessment plan. Volume I of the elementary edition also contains a section on test construction and the curricular implications of proficiency assessment.

The *Sample Assessment Exercises Manuals* were developed to aid districts in designing an instrument to assess proficiency in the basic skills. If a district decides to use the items included in the appropriate manual, the items and procedures may be used as presented or altered to fit the needs of the district. The manuals have been distributed to all offices of county superintendents of schools and to all school districts; however, a limited number of additional copies are available and can be purchased at cost ($54 for volumes I and II of either the elementary edition or the secondary edition) by contacting:

Bureau of Publications
California State Department of Education
P.O. Box 271
Sacramento, CA 95802
(916) 445-1260

The contents of volumes I and II of the elementary and secondary editions of the *Sample Assessment Exercises Manual* are listed below.

Elementary Edition

Volume I—Sample Exercises

- Introduction
  - Legal Requirements
  - Technical Assistance to Districts

- How to Use SAEM
  - Volume I of SAEM
  - Volume II of SAEM
  - Questions and Answers
- School Context Model
  - Development of Item Specifications
  - Development of Sample Items
  - Listing of School Context Model Skills, by Category and Page Number
- Reading
  - Development of Reading Passages
  - Organization of the Specifications and Items
    - Reading Passages
- Writing
  - Written Expression—Objective Measurement
  - Spelling Word Lists
  - Writing Samples—Direct Measurement
    - Selecting the Type of Writing to Measure
    - Preparing Writing "Prompts" for the Pupils
    - Developing Scoring Guides
    - Combining the Scoring Approaches
    - Training Readers to Score Essays
    - Writing Exercise—Expressive Essay
    - Writing Exercise—Explanatory Essay
    - Writing Exercise—Persuasive Essay
- Mathematics
  - Organization of the Item Specifications and Sample Items
    - Advisory Panels
- Functional Transfer Model
  - Organization of the Item Specifications and Sample Items
  - Task 1.0
  - Task 2.0
  - Task 3.0
  - Task 4.0
  - Task 5.0
    - Advisory Panels
- Text Construction and Curricular Implications
  - Step 1: Identifying Skill Areas for the Test
  - Step 2: Constructing Item Specifications
  - Step 3: Constructing or Selecting Items
  - Step 4: Field-Testing the Items
    - Pilot-Testing
    - Field-Testing
    - Determining Test Reliability
    - Selected References on Reliability
  - Step 5: Using Test Results
    - Level 1—Individual Results
    - Level 2—Group Results, by Content Area
    - Level 3—Group Results Across Content Areas

List of Figures

Figure 1. State Department of Education Technical Assistance Materials
Figure 2. Layout of Reading Item Specification and Definition of Terms
Figure 3. Layout of Written Expression Item Specification and Definition of Terms
Figure 4. Kinneavy's Categories of Discourse
Figure 5. Summary Sheet for Analytic Scoring
Figure 6. Summary Sheet for Analytic Scoring
Figure 7. Summary Sheet for Analytic Scoring
Figure 8. Layout of Mathematics Item Specification and Definition of Terms
Figure 9. Sample Item Specification
Figure 10. Sample Statistics Sheet

List of Charts

Chart 1. Holistic Scoring Guide, Pen Pal
Chart 2. Analytic Scoring Guide, Pen Pal
Chart 3. Holistic Scoring Guide, Spaceman
Chart 4. Analytic Scoring Guide, Spaceman
Chart 5. Holistic Scoring Guide, Field Trip
Chart 6. Analytic Scoring Guide, Field Trip
Chart 7. Levels of Review of Test Results

Volume II—Item Statistics for Grades 4 and 6

- The Field Test
- How to Read the Item Statistics
  - Districts Participating in the Proficiency Field Test
- Reading
- Written Expression
- Mathematics
- Functional Transfer

Secondary Edition

Volume I—Sample Exercises

- Introduction
  - Legal Requirements
  - Technical Assistance to Districts
- How to Use SAEM
- School Context Model
  - Development of the Item Specifications
  - Development of the Sample Items

Listing of School Context Model Skills, by Category and Page Number
    Reading
    Writing
    Written Expression—Objective Measurement
    Writing Samples—Direct Measurement

  Mathematics
  Advisory Panels

- Functional Transfer Model
- Applied Performance Model

  An Introduction to Applied Performance Tests (APTs)
  Examples of Three Modes of APTs

- Vocational Education

Volume II—Item Statistics for Grades 7, 9, and 11

- Introduction
- How to Use *SAEM*
- The Field Test
- How to Read the Item Statistics

  Districts Participating in the Field Test

- Reading Statistics
- Written Expression Statistics
- Math Statistics
- Functional Transfer Statistics

Appendix B

Proficiency Assessment Requirements in California: A Status Report

---

The 1979 edition of *Technical Assistance Guide for Proficiency Assessment* was to include as Appendix B a report on the status of proficiency assessment in California. That report, however, is being published as a separate document, *Implementation of the Proficiency Assessment Requirements of AB 3408/76 and AB 65/77: A Status Report.* Copies of the report are available from Bureau of Publications, California State Department of Education, P.O. Box 271, Sacramento, CA 95802; (916) 445-1260.

Appendix C Guidelines for Editing Test Items

In preparing or selecting test items to be used for proficiency assessment, school districts should judge the adequacy and appropriateness of the items they plan to use, and they should examine the mechanical features of the test. This appendix was prepared by the Department of Education as a guide for school districts to use in their item selection and test review process.

Selecting and Reviewing Items

A number of criteria can be used to judge the adequacy of test items. However, rather than describing all these criteria, a few basic rules are presented here for school districts to consider in screening out or correcting inadequate items:

1. Multiple-choice and true-false items should have a single best answer. When two or more answers are equally plausible, the item should be revised or eliminated from the item data bank. An example of an item without a single best answer follows:

   Choose the correct punctuation mark that belongs at the end of each sentence:

   We are going to the park
   A. Period
   B. Question mark
   C. Exclamation mark

   Although a period may be the end punctuation mark that a person would be expected to use most often with this sentence, the stem (sentence) could be correctly interpreted as an interrogatory or exclamatory sentence. Without a more specific context, any of the punctuation marks could be correct. To improve the item in the example, it could be reworded as follows:

   Are we going to the park
   A. Period
   B. Question mark
   C. Exclamation mark

2. Multiple-choice and true-false items should require the student to make meaningful discriminations. All the distractors (incorrect responses) should be plausible or appealing to those students who do not possess the knowledge demanded by the item. Items with trivial or unrealistic distractors should be revised or omitted from the item data bank. An example of an item illustrating the problem follows:

   Prior to A.D. 1066 the common language in England was Old English. Which of the following peoples had contributed to this language?

   A. Celts
   B. Chinese
   C. Mexicans
   D. Indians

   This item could be improved in the following way:

   Prior to A.D. 1066 the common language in England was Old English, to which all of the following peoples had contributed except:

   A. Celts
   B. Danes
   C. Anglo-Saxons
   D. Normans

   Note that all the alternative answers now are equally plausible to students who have a general knowledge but are not familiar with the dates various national groups migrated to England.

3. The length of the distractors in a multiple-choice test item should be comparable and gramatically parallel to the correct response. Items with response alternatives that are not comparable should be revised or omitted. Two examples of this type of error follow:

   Prior to A.D. 1066 the common language in England was Old English, to which all of the following peoples had contributed except:

   A. Celts
   B. Danes
   C. Anglo-Saxons
   D. The Normans who migrated from France

   In this case, the length of the distractor is a cue as to the correct answer. The second example illustrates less subtle cues, which can unintentionally work their way into distractors:

   Which of the following is a chemical change?

   A. Ice changing into water
   B. Water changing into ice
   C. Paper burning and changing into ash
   D. Water changing into steam

The above item has two significant weaknesses:

a. The incorrect distractors deal with processes associated with water while the correct answer addresses itself to an entirely different substance and process.

b. The correct answer is slightly longer but also involves two process words (i.e., burning and changing) while the distractors have a single process word and are shorter.

As this item stands, testwise students will probably be able to identify the correct response whether or not they know the subject matter. The above item could be improved by modifying the item in the following way:

Which of the following involves a chemical change?

A. Melting
B. Freezing
C. Burning
D. Evaporating

4. The use of specific determiners should be avoided (i.e., words often found in false statements are "only, never, all, every, always, none, and no"; and in true statements the words are "usually, generally, sometimes, customarily, often, could, and frequently." Test items containing specific determiners should be revised if the determiners direct the student to the correct response. An item illustrating this type of error follows:

When the temperature of a gas is increased,

A. the pressure always increases.
B. the volume always decreases.
C. the pressure depends on the volume.
D. the kinetic energy always changes.
E. the volume never changes.

Students familiar with the always-never type of distractor could easily identify item C as the desired response, even though they might not know the gas laws.

5. A completion-type test item should use a relatively small number of well-chosen blanks placed near the end of the statement. An item that has so many blanks that it is unintelligible should be revised or omitted. The following item is illustrative of that type of error:

_____ is a tissue about _____ millimetre thick.

If this item were intended to measure knowledge about human skin tissue, there are not enough significant cues to indicate clearly to the student the content area for a correct response. This short answer completion-type item could be improved in the following way:

Human skin is a tissue about ______ millimetre(s) thick.

Note the inclusion of (s) after millimetre so as not to cue the response to one millimetre or less.

6. Items should be related to meaningful learning goals. An item assessing trivial content or peripheral content should be revised or omitted from the item data bank. Consider the following example:

Which of the following presidents of the United States had wooden false teeth?

A. Washington
B. Harding
C. Hoover
D. Truman
E. Nixon

7. Items should contain content which represents a comparable task for all students; i.e., items should not contain content oriented toward a particular segment of a student population, sex, or ethnic group.

8. An item and its distractors should be so worded that their whole content functions in determining the answer, rather than depending on a key word, phrase, or part of the item to elicit a particular response from the student. The following item is illustrative of this problem:

A general in the Civil War who became President of the United States was:

A. Jefferson
B. Adams
C. Grant
D. Hoover
E. Nixon

In this situation, a student able to identify Grant as the only general on the list can correctly answer the item without making the discriminations seemingly required to answer the item. However, such a gross level of discrimination may be a desired learning outcome goal for some students. This item could be made more difficult by changing the item to the following:

A general in the Civil War who became President of the United States was:

A. Washington
B. Jackson
C. Grant
D. Garfield
E. Eisenhower

Students responding to this revised item would have to make finer discriminations to choose the correct answer.

9. A test item should stand alone unless deliberately related to other items. If a valuable item relates to other valuable items, then all the necessary related items should be tied together so that they will not be incorrectly used as isolated items.

10. Each item should consist of clear, concise language and be definite and unambiguous in meaning. True-false

items should avoid statements that are partly true and partly false or that contain qualifications or exceptions.

11. Trick questions are to be avoided, and negative questions should be avoided as much as possible.
12. Multiple-choice items should be written in direct question or incomplete statement form, whichever form most effectively presents the individual items.
13. The distractors should be independent and mutually exclusive. As far as possible, they should be arranged in numerical or logical order.
14. Essay questions should be restricted to measurements of objectives not readily measured by other item types.
15. Essay questions should be framed around specific problems and adequately delimited in scope. Each question should state clearly and accurately the desired extent and depth of the answer. It should state how many reasons, examples, arguments, and so forth are expected for the person to receive full credit for the item. The directions to "explain, outline, state, and compare" should indicate accurately the type of answer that will receive full credit.
16. Computational problems should state the degree of precision expected in the answer. The question should state clearly the extent to which approximations or fractional answers are to be rounded. The question should state clearly whether units (such as square metre or metres per second) are to be included by the student in the answer.

Reviewing the Mechanical Features of the Test

In addition to judging the adequacy of test items, school districts must also examine several mechanical features of the tests that they intend to use. The following checklist should be helpful to them in making such an examination:

- **Item Format**
  1. Are the items in the text numbered?
  2. Is each item complete on a page?
  3. Does the reference material for an item appear on the same page as the item or on a facing page?
  4. Are the item responses arranged to achieve both legibility and economy of space?
- **Scoring Arrangements**
  1. Has consideration been given to the practicability of a separate answer sheet?
  2. Are answers to be indicated by symbols rather than underlining or copying?
  3. Are answer spaces placed in a vertical column for easy scoring?
  4. If answer spaces are placed at the right of the page, is each answer space clearly associated with its corresponding item?
  5. Are the answer symbols to be used by the students free from possible ambiguity due to careless penmanship or deliberate hedging?
  6. Are the answer symbols to be used by the students free from confusion with the substance or content of the responses?
- **Distribution of Correct Responses**
  1. Are correct answers distributed so that the same answer does not appear for a long series of consecutive questions?
  2. Are correct answers distributed to avoid an excessive proportion of items in the test with the same answer?
  3. Is patterning of answers in a fixed, repeating sequence avoided?
- **Grouping and Arrangement of Items**
  1. Are items of the same type requiring the same directions grouped together in the test?
  2. Where juxtaposition of items of markedly dissimilar content is likely to cause confusion, are items grouped by content within each item type grouping?
  3. Are items generally arranged from easy to more difficult within the test as a whole and within each major subdivision of the test?
- **Directions for Answering Questions**
  1. Are simple, clear, and specific directions given for each different item type in the test?
  2. Are directions clearly set off from the rest of the test by appropriate spacing or type style?
  3. Is effective use made of sample questions and answers to help clarify directions for unusual item types?
- **Correction for Chance**
  1. If deductions are to be made for wrong answers, are students so informed?
  2. If no deductions are to be made for wrong answers, are students advised to answer every question according to their best judgment?
- **Printing and Duplicating**
  1. Is the test free from annoying and confusing typographical errors?
  2. Is the legibility of the test satisfactory from the viewpoint of type size, adequacy of spacing, and clarity of printing?
  3. Is the length of line neither too long nor too short for easy comprehension?

Appendix D Considerations for Conducting an Assessment

Students should be informed of the time, date, and place of assessment in a manner that will increase their interest. Special care should be taken not to arouse a student's anxiety. Students may be told, for example, that no special preparation is necessary and that their knowledge of the basic skills they normally use both at home and in school will be assessed. They should be told that the purpose of the assessment is to identify not only those skills they have already mastered but also those skills they have not mastered.

To give a pupil the best opportunity to demonstrate his or her ability, the persons conducting the assessment should do the following:

- To avoid fatiguing the students, conduct the assessment over several days.
- Avoid assessing students' skills after the students have undergone periods of strenuous physical exercise.
- Avoid assessing students' skills on a Monday or a Friday.
- If the assessment tasks must be performed within a set period of time, ensure that the time is available.
- If time limits are fixed, use a stop watch to ensure that the time period is measured accurately.
- Isolate from ringing bells and other noises the area in which the assessment is to be made, and make the area as quiet as possible.
- Avoid unnecessary interruptions.
- Have all materials prepared ahead of time and organized for quick distribution.
- Make certain that students know exactly what they must do before they begin each task in the assessment instrument.
- If the assessment requires a pupil to perform a mechanical operation, ensure that safety procedures are enforced.
- For a paper and pencil test, monitor all pupils to make certain that they are recording their responses correctly on their answer sheets.
- When assisting pupils or giving directions, guard against indicating the correct answer.
- Make certain that all personnel involved in administering the assessment instrument are familiar with all details of the assessment procedure, including the step-by-step administration, recording responses, and security precautions.

Appendix E Sample Forms for Recording and Reporting Proficiency Assessment Data

Record of Student Proficiency Assessment-Reading

Student's name ______________________

Identification number ______________________

Proficiencies	Assessment No. 1					Assessment No. 2					Assessment No. 3				
			Attained		Conference			Attained		Conference			Attained		Conference
	Score	Date	Yes	No	Date	Score	Date	Yes	No	Date	Score	Date	Yes	No	Date
1. Given a reading selection, the learner identified an example of illogical thinking, such as inconsistencies in data, false assumptions, and fallacies.															
2. Given a sentence containing a multimeaning word and given the complete dictionary definition of the word, the learner indicates the meaning of the word appropriate to the context of the sentence.															
3. The learner followed written instructions to fill out a given form or application.															
4. Given a reading selection and a list of the main events in the selection, the learner ranked the events in correct sequence.															

Student Progress Chart in Meeting Graduation Requirements

	Record of progress in meeting objective, by number of objective									
	No. ______			No. ______			No. ______			
	Observations			Observations			Observations			
Student's name	1	2	3	1	2	3	1	2	3	**Comments**

Date ______________

Teacher's name ______________

School ______________

Grade level ______________

Individual Student Mastery Report

```
PROGRAM SPM106 FILE R78277133            NEWPORT-MESA UNIFIED SCHOOL DISTRICT                         DATE 06/27/77

SCHOOL:   ESTRANCIA     NUMBER:       78    TITLE:              GRAD REQ: COMP-A            TOTAL ITEM COUNT:          78
TEACHER:  JOHNSON       SEQ. NO.:    230    TEST DATE:          06/10/77                    TOTAL OBJECTIVE COUNT:     26
GRADE:    09                                PARAMETER FILE:     DISTRICT SERIES:    ALL     TOTAL STUDENT COUNT:

STUDENT NAME:
THE FOLLOWING OBJECTIVES HAVE BEEN MASTERED:                                    # ITEMS    % ITEMS    % FOR LAST  DATE
                                                                                CORRECT    CORRECT    MASTERY     TESTED
CMP 2.3.3.2    Given a multiplication problem with two proper fractional         3/03      100%       66%        6/10/77
               factors, the student will find the product and express it
               in its simplest form.
CMP 2.3.5.5    Given any problem involving addition of decimal fractions,        2/03       67%       66%        6/10/77
               the student will find the sum.
CMP 2.3.8.1    Given a problem involving division of a decimal by a whole        2/03       67%       66%        6/10/77
               number, the student will find the quotient.
CMP 2.3.8.2    Given a problem involving division of a decimal by a              2/03       67%       66%        6/10/77
               decimal, the student will find the quotient.
CMP 2.4.1.2    Given a numeral, the student will round it off to its             2/03       67%       66%        6/10/77
               nearest hundred.
CMP 2.4.1.3    Given a large whole number of no more than six digits, the        2/03       67%       66%        6/10/77
               student will identify the indicated approximation for the
               given number.

THE FOLLOWING OBJECTIVES HAVE NOT BEEN MASTERED                                 # ITEMS    % ITEMS    % FOR LAST  DATE
                                                                                CORRECT    CORRECT    MASTERY     TESTED
CMP 2.1.4.5    Given any division problem with whole numbers, the student        1/03       33%       66%        6/10/77
               will find the quotient.
CMP 2.3.1.3    Given an addition problem of fractional numerals with un-         1/03       33%       66%        6/10/77
               like denominators with a sum of one or less, the student
               will find the sum.
CMP 2.3.6.5    Given a subtraction problem involving any type of decimal         0/03        0%       66%        6/10/77
               fractions, the student will find the difference.

CMP 2.3.7.4    Given a multiplication problem with any type of decimal           1/03       33%       66%        6/10/77
               fractions, the student will find the product.
CMP 2.3.8.3    Given a problem involving division of a whole number by a         0/03        0%       66%        6/10/77
               decimal, the student will find the quotient.
CMP 2.4.1.1    Given a numeral, the student will round it off to its             1/03       33%       66%        6/10/77
               nearest ten.
CMP 2.4.1.5    Given an addition, subtraction, multiplication, or                0/03        0%       66%        6/10/77
               division problem of rational numbers, the student will
               name an indicated approximation for the answer.
```

Item Analysis Report

```
                                  NEWPORT-MESA UNIFIED SCHOOL DISTRICT
PROGRAM POE060 FILE IT0277 CMP                                                              DATE 06/17/77
        SCHOOL:   ESTANCIA                        GRADE:                   06/10/77
 EP AREA:   COMPUTATION
   CATEGORY 1.0 BASIC ARITHMETIC
     SUB-CATEGORY 1.1 COUNTING
       GOAL 1.1.1  The student will be able to use arabic numerals to count objects and words.
          OBJECTIVE 1.1.1.5  Given the word form of a number to billions, the student will read the word form
                             and write its numeral name.
            ASSESSMENT ITEMS

                   TOTAL                                    RESPONSE ALTERNATIVES
            FORM    ITEM   ATTEMPTS   %RJT   %WRG   %NR   NR    A     B      C     D    E
             A       23      109       71     28      1    1    5     5     77*    21
             A       54      109       80     12      8    9    5    87*     4      4
             A               109       55     32     13   14    3    60*     6     23    3
            TOTAL    72      327       69     24      7

     SUB-CATEGORY 1.2 FACTS
       GOAL 1.2.1  The student will be able to use the addition/subtraction facts.
          OBJECTIVE 1.2.1.3  Given a series of open addition and subtraction equations of one-digit numbers,
                             the student will complete them by finding the missing sum or difference.
            ASSESSMENT ITEMS
                   TOTAL                                    RESPONSE ALTERNATIVES
            FORM    ITEM   ATTEMPTS   %RHT   %WRG   %NR   NR    A     B      C     D    E
             A        3      109       69     10      1    1    7    97*     1     2    1
             A       20      109       76     24                8     9      6     3   83*
             A       76      109       74     12     14   15    5    81*     3     3    2
            TOTAL            327       80     15      5

       GOAL 1.2.2  The student will be able to use the multiplication/division facts.
          OBJECTIVE 1.2.2.3  Given any single-digit multiplication or division combination with whole
                             number quotient, the student will identify the product or quotient.

            ASSESSMENT ITEMS                                RESPONSE ALTERNATIVES
                   TOTAL
            FORM    ITEM   ATTEMPTS   %RHT   %WRG   %NR   NR    A     B      C     D    E
             A       49      109       86      7      6    7    1     2     94*    2    3
             A       52      109       79     15      6    7    3     3      4    86*   6
             A       77      109       75     10     15   16    3     5     82*    1    2
            TOTAL            327       80     11      9

  CATEGORY 2.0 COMPUTATION
     SUB-CATEGORY 2.1 WHOLE NUMBER COMPUTATION
       GOAL: 2.1.1  The student will be able to add whole numbers.
```

Objective Matrix Report

```
PROGRAM SPM103 FILE R78277133                   NEWPORT-MESA UNIFIED SCHOOL DISTRICT                                   DATE 06/15/77

                                                   STUDENT PROGRESS MONITORING SYSTEM REPORT #3

SCHOOL:    ESTRANCIA      NUMBER:       78        TITLE:              GRAD REQ: COMP - A                TOTAL ITEM COUNT:             78
TEACHER:   JONES          SEQ. NO.:    235        TEST DATE:          06/10/77                          TOTAL OBJECTIVE COUNT:        26
GRADE:     09 10 11 12                            PARAMETER FILE:     DISTRICT SERIES:   ALL            TOTAL STUDENT COUNT:          10

                          SEP AREA:       CMP  CMP  CMP  CMP  CMP  CMP  CMP  CMP  CMP  CMP  CMP  CMP  CMP  CMP  CMP  CMP  CMP  CMP  CMP  CMP
                          CATEGORY:         1    1    1    2    2    2    2    2    2    2    2    2    2    2    2    2    2    2    2    2
                          SUB CATEGORY:     1    2    2    1    1    1    1    1    3    3    3    3    3    3    3    3    3    3    3    3
                          GOAL:             1    1    2    1    2    3    4    4    1    1    1    2    2    2    3    3    5    6    7    8
                          OBJECTIVE:        5    3    3    8    8    3    1    5    1    2    3    1    2    5    1    2    5    5    4    1
****************************************************************************************************************************************
Barry      LISA       ANN                   X    X    X         X    X    X    X    X                             X    X                   X
Clark      COLLENE                                              X    X         X    X                             X              X
Gilbert    MARY       CATHERINE             X    X    X    X    X    X    X    X         X              X         X    X    X         X    X
Mirhiro               JEFFRIE                    X    X    X    X    X         X    X    X    X                             X
Parsons    SARA       ELLEN                      X    X    X    X    X    X    X    X    X                             X              X    X
Packard    GEIA       VESIA                 X    X    X    X    X    X    X    X    X    X    X    X    X         X    X              X    X
Schultz    LILLIAN                          X         X         X                                                      X    X         X
Smith      SHARON     PATRICIA              X    X    X    X    X    X    X    X         X         X              X    X    X    X    X    X
Turner     RHODDA     ANN                        X         X    X    X              X    X         X
Wolsworth  WILLIAM    IAN                   X    X    X    X    X    X                                                  X
****************************************************************************************************************************************
SEQUENCE NUMBER TOTALS

               STUDENTS MASTERED:           6    8    8    7   10    9    5    7    6    6    2    3    2         5    7    4    2    5    5
               STUDENTS MASTERED:          60   80   80   70  100   90   50   70   60   60   20   30   20        50   70   40   20   50   50

             TOTAL # OF ITEMS:              3    3    3    3    3    3    3    3    3    3    3    3    3    3    3    3    3    3    3    3
               ITEMS MASTERED:              2    2    2    2    2    2    2    2    2    2    2    2    2    2    2    2    2    2    2    2
               PERCENT OF MASTERY:         66   66   66   66   66   66   66   66   66   66   66   66   66   66   66   66   66   66   66   66

CONTINUE ON FOLLOWING PAGE
```

Appendix F Sample Form for Recording Information on Proficiency Assessment Conferences

(as required by Education Code Section 51216)

Sample Form for Recording Information on Proficiency Assessment Conferences

	Assessment findings	Conference notification			
			Parent(guardian) and student notification		
Student's name	Findings	Date	Written	Phone	Responsible school official

Assessment conference				Instructional follow-up	
Parent (guardian), student, school staff conference		Action taken	Person responsible	Date began	Comments
Participants	Date				

Appendix G Background Information and Sample News Releases for the Media

Sample of background information
to be sent to the news media

FROM: Name of contact
Address
School district
Telephone number

Background Information on Assembly Bill 3408

Certain provisions of Assembly Bill 3408, enacted in September of 1976, became effective this year. The student-oriented law is designed to:

1. Ensure that every student graduating from high school in California has sufficient ability to understand what he or she reads, to communicate sufficiently in writing, and to compute sufficiently in mathematics to survive as an adult in the world into which the student is graduating.
2. Provide students with alternative means to complete courses mandated by law: American history and government, science, physical education, mathematics, and English.

The First Provision

The first provision of the new law will be accomplished by a proficiency assessment and development program. Student proficiencies will be assessed at least once in grades seven through nine and at least twice in grades ten and eleven. After June, 1980, no student can be awarded a high school diploma who has not successfully completed the assessment procedures set by the district's governing board.

The assessment procedures will show the student's ability to meet minimum graduation standards established by each school district governing board. These standards must be adopted by each local district by June, 1978. The standards must include, but need not be limited to, basic requirements in reading comprehension, writing, and computation.

Once a student demonstrates proficiency in the basic skills, he or she need not be reassessed.

A conference between educator, student, and parent must be held for each student who does not pass the assessment. Appropriate instruction must be provided in the basic skills for those students who do not pass the assessment, thereby ensuring the student opportunity to develop the proficiencies required for graduation.

The Second Provision

The second provision addresses an issue which did not exist in the prior law. Prior law required for graduation the completion of prescribed courses of study in English, American history and government, mathematics, science, and physical education. The new law still requires these courses, but it also requires districts to adopt "alternative means" for students to complete them. Listed by the law are such alternatives as "practical demonstration of skills and competencies, work experience or other outside school experience, interdisciplinary study, independent study, and credit earned at a postsecondary institution."

This law also requires that these alternative means be developed with the active involvement of parents, administrators, teachers, and students.

Sample News Release for Broadcast Media

PROFICIENCY ASSESSMENT

For immediate release

FROM: Name of contact
Address/School district
Telephone number

The high school graduating class of 1981 is entering ninth grade this year, and there's special significance in that for them. The members of this class and those in every class that follows will have to pass a "proficiency assessment" sometime before their graduation to be eligible for a high school diploma. Students will be assessed at least once between the seventh and ninth grades and at least twice in the tenth through eleventh grades. Once a student demonstrates proficiency in the basic skills, he or she need not be reassessed.

Although the class of 1981 has nearly four years to pass that assessment, local school districts have to act now. The standards on which the proficiency assessment will be based must be developed and adopted by each local school board by June of 1978.

But believe it or not, students, some of the burden for passing this test also rests with the educators. This is true because the law also requires that special instructional programs be developed for each student who does not pass the test. So by the time students graduate, they will have acquired basic competencies in reading comprehension, writing, and mathematical computation. That's what the program is all about.

Sample News Release for Newspapers

NEW PROGRAM WILL ENSURE ABILITY IN BASIC SKILLS FOR GRADUATING SENIORS

FROM: Name of contact
Address/School district
Telephone number

For immediate release

Today's ninth graders and those who follow them will be required to pass a proficiency assessment sometime before they receive a high school diploma. This is the gist of a law which goes into effect this year and which gives school districts three years to prepare for it.

Assembly Bill 3408, enacted in September, 1976, is designed to ensure that all high school graduates have sufficient ability in reading comprehension, writing, and math to survive as adults in the world into which they are graduating.

Students will have at least three chances between seventh and twelfth grades to pass the assessment. The law requires that it be given at least once in the seventh through ninth grades and at least twice in the tenth through eleventh grades.

Once a student passes the assessment, he or she need not take it again. But each time a student fails the assessment, the law requires that a conference be held between an educator, the parent, and the student; then appropriate instruction must be provided the student to strengthen those areas in which he or she is unable to meet the basic standards.

--MORE--

NEW PROGRAM WILL ENSURE ABILITY IN BASIC SKILLS FOR GRADUATING SENIORS

Assessment procedures will be based upon proficiency standards developed by each local board of education. Although the State Board of Education is providing each district with a sample assessment framework, including sample assessment items, the districts are strongly discouraged from simply adopting these.

"Each district is somewhat different in its needs and resources," a State Department of Education spokesperson said. "So the State Board is emphasizing the desirability of each district in determining what the proficiency standards should be locally."

These standards for graduation must be adopted by each local board of education by June, 1978. The standards must include minimum requirements for reading comprehension, writing, and computation, but they can also include other requirements if the local board so desires.

After June, 1980, students who have not passed the proficiency assessment test cannot receive a high school diploma. The class of 1981--the first to be affected--entered the ninth grade this year.

There is another provision in the law which is less noticeable but which is nonetheless important in that it opens new avenues of education for all students. Present state law requires that students complete prescribed courses in English, American history and government, mathematics, science, and physical education before they can graduate. The new law still requires these, but it opens a new door by further requiring districts to "adopt alternative means for students to complete the prescribed course of study, which may include practical demonstration of skills and competencies, work experience or other outside school experience, interdisciplinary study, independent study, and credit earned at postsecondary institutions."

--MORE--

A further requirement is that the alternative means be developed with the active involvement of parents, administrators, teachers, and students.

-30-

Appendix H Sample Forms for Making Community Surveys

Districts may wish to use the basic format in the samples in this appendix to develop a community survey.

Survey for Determining Minimum Requirements for High School Graduation

DIRECTIONS: Please respond to all of the following items. For each item, please place a check (✓) in either the YES or NO column. If you think the item *should be* a minimum requirement for all students from high school, check YES (✓). If you think the item *should not be* a minimum requirement for all students to graduate from high school, check NO (✓).

	Response	
	YES	NO
In order to graduate from high school, all students should be able to do the following:		
READING COMPREHENSION		
1. Find in the yellow pages of a telephone directory the telephone numbers of the stores that sell auto parts.	____	____
2. From a job announcement posted in a public place, list the qualifications needed to apply for a job.	____	____
3. Read newspapers and magazines for enjoyment.	____	____
MATHEMATICS		
4. Balance a checkbook.	____	____
5. Determine which of two similar items on a grocery shelf is the best buy.	____	____
WRITING		
6. Complete a job application without misspelling any words.	____	____
7. Write simple directions that could be followed to find a street corner in the city.	____	____

Survey for Determining Student Proficiency Levels for High School Graduation

DIRECTIONS: The purpose of this questionnaire is to obtain information from students, parents, educators, and other community members regarding the proficiency levels students should attain in reading comprehension, computation (mathematics), and writing. You are asked to write your rating of whether the following skills are: *essential, very desirable, or desirable* for functioning effectively in contemporary society. These ratings will assist district personnel to know which skills must be assessed as a part of the high school graduation requirements. Write a 1 to indicate you feel the skill is essential; 2, very desirable; or 3, desirable.

1–Essential. An individual *must* be able to perform this skill to function effectively in contemporary society.

2–Very desirable. An individual could function effectively in contemporary society without this skill. However, performing this skill or subskill enables an individual to function more efficiently in contemporary society.

3–Desirable. Performing this skill or subskill can be enriching but is not considered absolutely necessary for an individual to function effectively in contemporary society.

READING COMPREHENSION

All students should be able to do the following:

______ 1. Determine the correct meaning of a word by its use in a phrase or sentence (denotation).

______ 2. Determine the correct feeling a word conveys by its use in a phrase or sentence (connotation).

______ 3. Identify words having nearly the same meaning (synonyms).

______ 4. Identify words having a nearly opposite meaning (antonyms).

______ 5. From a group of words having identical sounds, identify the word that correctly completes the meaning of a phrase or sentence (homonyms).

All students will be able to comprehend literally the following (identifying or determining specific information which has been explicitly stated in a reading passage):

______ 6. Details (specific facts).

______ 7. Sequence (specific order of incident or action).

______ 8. Cause and effect (reasons for certain happenings and actions).

______ 9. Main idea (central theme).

______ 10. Cognitive outcomes (consequences of and predictions from).

______ 11. Author's direction and purpose (author's point of view).

All students will be able to comprehend interpretively or inferentially the following (using ideas and information explicitly stated to paraphrase, infer from, relate, or generalize from content contained in a reading passage):

______ 12. Details.

______ 13. Sequence.

______ 14. Cause and effect.

______ 15. Main idea.

______ 16. Cognitive outcomes.

______ 17. Author's direction and purpose.

All students will be able to comprehend critically the following (making evaluative judgments by comparing ideas or information presented in a reading passage with some external criteria or by internal criteria provided by the student's experience, knowledge, or values, as well as judgments which focus on the qualities of accuracy, acceptability, desirability, or worth):

______ 18. Details.

______ 19. Sequence.

______ 20. Cause and effect.

______ 21. Main idea.

______ 22. Cognitive outcomes.

______ 23. Author's direction and purpose.

All students will be able to demonstrate an understanding of the following, at least at a literal level of comprehension:

______ 24. A story or article contained in a newspaper, magazine, report, monograph, reference, or book.

______ 25. How to locate words, topics, persons, places, or things from an index or directory.

______ 26. Documents referencing events to times and places; for example, transportation schedules, movie listings, and class schedules.

______ 27. Business forms referencing financial costs to descriptions and codes; for example, paycheck stubs, fines, taxes, billing invoices, and schedules of fees or rates.

______ 28. Single product or brand advertisements.

______ 29. Multiple product and brands advertisements; for example, grocery ads.

______ 30. Use of a matrix; for example, television and radio programming schedules, internal revenue service schedules, and insurance policy coverage.

______ 31. Product hang-tags and product container labels; for example, directions for cleaning garments and soup labels having directions for use, contents, and volume or quantity.

______ 32. Step-by-step directions for product assembly; for example, putting together a barbecue set, bicycle, and children's toys.

______ 33. Billboard and poster advertisements and announcements.

______ 34. Signs; for example, traffic signs, informational and directional signs, warning or cautionary signs, and bus names.

______ 35. Common legal agreement forms; for example, guarantees, warrantees, lease agreements, and insurance policies.

______ 36. Classified advertisements.

______ 37. Graphics; for example, figures, charts, graphs, and maps.

______ 38. Read-to-write forms; for example, employment applications, credit applications, and common banking forms.

NOTE: This questionnaire should be developed further to include the skill areas of writing and computation, and these two sections should be written in the same basic format as the one used for reading comprehension.

Appendix I Sample Management and Operations Plans

Two sample management plans and two sample operations plans are included in this appendix. Management Plan 1 was developed in greater detail than Management Plan 2. However, both plans include essential activities to be completed in order to implement a student proficiency assessment system, as outlined in this guide. The two operations plans present the outlines for two selected management steps identified in Management Plan 2.

Management Plan 1

Major Management Activities for the District

1. Form task force to coordinate development and implementation of student proficiency assessment procedures.
2. Conduct informational meetings with principals and teachers.
3. Conduct informational meetings with parents.
4. Conduct informational meetings with students.
5. Ask school district governing board to invite key community representatives, principals, teachers, and students to serve on ad hoc committee.
6. Provide orientation for ad hoc committee.
7. Designate principals and teachers to prepare analysis of present graduation requirements, including alternative means of instruction.
8. Have ad hoc committee review present graduation requirements, including alternative means of instruction.
9. Designate staff to prepare pilot version of parent, student, and staff questionnaire on graduation requirements (possibly including questions regarding alternative means of instruction).
10. Have ad hoc committee complete pilot version of questionnaire on graduation requirements and instructional alternatives and recommend modifications.
11. Designate staff to prepare final version of questionnaire on graduation requirements and instructional alternatives.
12. Give questionnaire on graduation requirements to sample of students, parents, and community members (stratified random sample would be preferred).
13. Compile and analyze data.
14. Designate staff to develop list of proficiencies based on questionnaire data.
15. Have ad hoc committee review list of proficiencies and recommend modifications.
16. Designate staff to prepare preliminary estimate of feasible methods for making an assessment of proposed student proficiencies.
17. Send to superintendent and his or her designees for further review or modification a modified list of the proficiencies and proposed assessment instruments and procedures.
18. Designate staff to develop assessment instruments and procedures for each identified proficiency.
19. Have proficiency assessment instruments and procedures field tested.
20. Based on field test data, refine and modify assessment instruments and procedures (and give second field test if necessary).

21. Have the superintendent and his or her designees make final modification of proficiencies if warranted by field test data.
22. Send final list of proficiencies to board for public hearing.
23. Have governing board adopt list of proficiencies.
24. Designate staff to make recommendations on pupil proficiency performance standards and differential standards to the superintendent.
25. Have superintendent and his or her designee review recommended performance standards.
26. Send recommended performance standards to governing board for public hearing.
27. Have governing board adopt prescribed proficiency standards, including differential standards.

Major Management Activities for the School

28. Compile and distribute student handbook on course of study and proficiency requirements.
29. Conduct informational meeting for public hearing on adopted proficiencies and alternative means of instruction.
30. Conduct departmental informational meetings for teachers and counselors on adopted proficiencies and alternative means for students to achieve required levels of proficiency in basic skills.
31. Conduct orientation of teachers and counselors on new requirements and programs.
32. Have counselors or designated teachers conduct series of small group orientation sessions for students.
33. Conduct individual conferences for students, as needed.
34. Implement instructional program and assess student proficiencies at least once during the seventh through ninth grades and twice during the tenth through eleventh grades.
35. Interpret and disseminate results of assessment.
36. Arrange and conduct student performance conferences.
37. Define, implement, monitor, and evaluate instructional program and individualized program of basic skills instruction, as necessary.
38. Repeat cycles of assessment-conferencing-instruction until minimal proficiency in basic skills is established.
39. Conduct an updated informational session for governing board and the public.
40. Repeat appropriate portions of process.

Management Plan 2

Major Management Steps for the District

1. Identify minimal skills and knowledge required for adult life.
2. Develop and implement required courses of study and alternative programs.
3. Develop proficiency assessment frameworks.
4. Establish standards of proficiency in basic skills as required for high school graduation.
5. Have governing board adopt standards of proficiency.
6. Disseminate information on standards of proficiency to interested publics (see Operations Plan 1 which follows).

Major Management Steps for the School

7. Assess student progress toward proficiency at least once during the seventh through ninth grades and twice during the tenth through eleventh grades.
8. Interpret and disseminate results of assessment (see Operations Plan 2 which follows).
9. Arrange and conduct student performance conferences.
10. Define, implement, monitor, and evaluate individualized programs of basic skills instruction.

11. Repeat cycles of assessment-conferencing-instruction until minimal competency in basic skills is established.

Each step in the management plan should have a corresponding operations plan. Operations plans for two selected management steps follow.

Operations Plan 1

The following describes an operations plan for management step number 6 in Management Plan 2.

What	Who *(Districts designate named individuals.)*	When
1. Describe in writing the competencies required for graduation.		June, 1978
2. List competencies and standards of proficiency by basic skill area.		June, 1978
3. Develop a statement of explanation as to competencies or standards of proficiency: definition, purpose, context, development and selection, use, and implications.		July–August, 1978
4. Develop statement of explanation as to existing or developing resources for helping students obtain minimal proficiencies: courses of study, skill labs, work experience, counseling, and tutoring (relate programs to competencies).		July–August, 1978
5. Develop for parents, teachers, and students separate covering letters to go with the statements and lists.		July–August, 1978
6. Send to parents of students entering the seventh and ninth grades (beginning with high school class of 1981) the covering letter, lists of competencies and the proficiency standards, and the statement of explanation.		Sept., academic years (beginning in 1978)
7. Provide inservice training for parents, teachers, and students if it is needed.		Sept.–June, 1978-79
8. Send to students entering grades seven and nine a letter describing the new requirements for graduation.		Sept., academic years (beginning in 1978)
9. Publish lists of competencies and proficiency standards for high school graduation as a public record.		Sept., 1978

Operations Plan 2

The following describes an operations plan for management step number 8 in Management Plan 2.

What	Who *(Schools designate named individuals.)*	When
1. Describe for each required skill the student's level of proficiency by calculating the percentage of performance indicators (test items) the student accomplished satisfactorily.[1]		As soon as possible following each assessment of student progress
2. Compare for each required skill the student's actual level of proficiency with the minimal level of proficiency required.		
3. Determine as minimally competent the students whose percentage correct scores are equal to, or greater than, the minimal level of proficiency established for each required skill.		
4. Determine as deficient in basic skills those students whose percentage correct scores are lower than the minimal level of proficiency in one or more of the skills considered necessary for graduation.		
5. Report each performance deficiency as the percentage difference between the minimal level of proficiency and the actual level of proficiency; i.e., a 20 percent performance deficiency in computational skills.		
6. List the skills and standards of proficiency the student has and has not demonstrated.		
7. Develop a standard form or forms for reporting individual competency-based test results in the basic skill areas of reading, writing, and mathematics.[2]		May, 1980
8. Develop a brief guide to the interpretation of competency-based test results.		May, 1980
9. As soon as possible following each assessment of student progress, send the test results for individual students to the student, the parents, and the school.		June, 1980 (latest starting date)
10. Send test results for group data to the district and the school district governing board.		July–Aug., 1980 (latest starting date)
11. As requested, provide training for all parties on the interpretation and implications of the test results.		Sept.–June, 1980-81

---

[1] The formula is straightforward: Level of proficiency = $\frac{\text{Number of correct indicators}}{\text{Total number of indicators}}$ × 100 percent. When performance indicators or test items are weighted differently, the formula does not apply.

[2] The reader should understand clearly that assessments of minimal competency in a skill or knowledge area cannot be interpreted or reported in terms of percentile ranks or a student's relative standing in any group. The mandates require that schools ensure their publics that students have achieved a certain level of proficiency, not just done as well as a certain percentage of other students.

Appendix J Suggested Announcement on Proficiency Assessment to Be Given to Students

The following note may be used by schools to explain the process of basic skills assessment to their students.

A Note to Students

A new education law in California requires students to read, write, and do mathematics at required levels before being granted a high school diploma. The state Legislature passed the law because it believes some students graduate from high school without having learned important basic skills.

An important part of this law is that the required levels of reading, writing, and mathematics skills are to be decided by each local school district. Therefore, your school district may set standards which differ from the standards of neighboring districts. This is good, because each district can set standards based on the needs and goals of the students in that district.

You can help make the new law effective. The implementation of the new law will probably create some changes in your school. In order to make those changes reasonable and acceptable, your school district will need advice from you, your parents, and other people in the district. Watch for announcements in your local newspaper regarding your district's plans for setting proficiency standards and be ready to offer suggestions.

What changes will take place? The law requires the following:

1. Students will be tested at least once in grades seven through nine and twice in grades ten and eleven. If you pass the final test, which may be written but does not have to be, you do not have to take the test again.
2. If you do not pass the test, your school is required to hold a conference with you and your parents or guardian to talk about where you have done well and where you may need some help.
3. If you need help, your school is required to give you instruction to help you learn the basic skills.

The important thing is to help students learn basic reading, writing, and mathematics skills. You cannot get a diploma just by passing the proficiency test in basic skills. Districts still have courses which you will be required to complete. When you graduate, though, you will know that you are able to read, write, and do mathematics at a level that the community where you live decided was important.

Appendix K Developing Proficiency Programs in California Public Schools: Some Legal Implications and a Suggested Implementation Procedure

The governing board of each California school district maintaining a junior or senior high school is required by Assembly Bill 3408, as modified by Assembly Bill 65,[1] to adopt standards of proficiency in basic skills for pupils by June 1, 1978. Boards governing districts maintaining grades six or eight, or the equivalent, must do the same by June 1, 1979.[2] The new law further provides that "subsequent to June, 1980, no pupil shall receive a diploma of graduation from high school if he or she has not met the standards of proficiency in basic skills prescribed by the secondary school district governing board."[3] The stated intent of the Legislature in passing the new law was that "pupils attending public schools in California acquire the knowledge, skills, and confidence required to function effectively in contemporary society."[4]

The deadlines imposed by the new law raise serious questions about whether school districts will be able to develop and implement new proficiency standards in a sound and careful way. The deadlines also raise serious questions about whether school districts will be able to comply with the new law without being unfair to students, thus making districts vulnerable to legal challenge by students and parents. Although districts obviously cannot be guaranteed immunity from legal problems, the purpose of this article is to suggest a two-phase implementation procedure that is designed to meet the requirements of the new law and, at the same time, to reduce the risk of legal attack by parents and students.

Since it is important to understand the legal and policy analysis that forms the basis for this two-phase implementation procedure, this article is divided into the following parts:

- Model Approach to Setting New Graduation Standards
- Racial and Linguistic Discrimination
- Inadequate Notice and Phase-in Periods
- Inadequate Matching of Test and Instruction
- Implementation Procedure: Phase I
- Implementation Procedure: Phase II
- Community Involvement
- Approaches to Instructional Validity and Assessment
- Some Concluding Cautionary Notes

Model Approach to Setting New Graduation Standards

Before new graduation standards are used as a basis for denying any student a diploma, a sound and careful approach to setting the new standards should:

1. Provide for substantial parental and other community involvement in developing and adopting educational goals, performance objectives, and assessment procedures.
2. Provide sufficiently detailed advance notice of the new educational goals, performance objectives, and assessment procedures to students, parents, and teachers.
3. Make necessary changes in curriculum to reflect new educational goals and performance objectives.
4. Take steps to ensure that classroom instruction reflects the new curriculum.
5. Provide for a sufficient phase-in period of the new curriculum and instruction. Sufficient phase-in may take years, depending upon the degree of curricular/instructional change.
6. Take steps to ensure that the assessment procedure meets professional psychometric standards and has instructional validity (as defined below).

While obviously difficult to implement prior to the law's June, 1980, deadline, this kind of approach could be

---

Note: This article was prepared by Merle Steven McClung for the California State Department of Education in order to provide assistance to school districts in developing proficiency programs pursuant to Assembly Bill 3408 (as modified by Assembly Bill 65). Mr. McClung works part time as a staff attorney at the Center for Law and Education, 6 Appian Way, Cambridge, MA 02138. This article was prepared in Mr. McClung's private capacity and reflects his personal analysis and opinion, not necessarily that of the Center for Law and Education or the State Department of Education. As emphasized on page I-10 of this guide, the Department of Education has no mechanism for issuing legal or legislative interpretations that are binding upon school districts. Therefore, to obtain binding and protective interpretations on legal issues relating to AB 3408, a district is encouraged to obtain an opinion from its own attorney.

[1] Section I of this guide contains the Education Code sections added or amended by AB 3408 and AB 65 as well as a discussion of their provisions.

[2] Education Code Section 51215.

[3] Ibid., Section 51217.

[4] Section 42, Assembly Bill 65, Chapter 894, Statutes of 1977.

implemented by districts without great difficulty as part of the two-phase implementation procedure described below.

The requirement that no student can be given a diploma of graduation after June, 1980, unless he or she has met the newly adopted proficiency standards means that school districts may run a high risk of confronting the kind of legal problems set forth in "Competency Testing: Potential for Discrimination" (Merle McClung, *Clearinghouse Review*, September, 1977, pages 439–47)[5] and in "Are Competency Testing Programs Fair? Legal?" (Merle McClung, *Phi Delta Kappan*, February, 1978, pages 397–400). These legal problems might be raised by students and their parents if competency testing programs are characterized by the following:

1. The potential for racial and linguistic discrimination
2. *Inadequate advance notice and phase-in periods prior to the initial use of the test as a graduation requirement*
3. Possible lack of psychometric validity or reliability of the tests
4. *Inadequate match between the instructional program and the test*
5. Inadequate remedial instruction that creates or reinforces tracking
6. Unfair apportionment of responsibility between students and educators for test failures

Readers interested in a more detailed legal and educational analysis of these six problem areas may want to read the "Competency Testing" article mentioned earlier. This article will focus on the second and fourth problems, which are italicized above and summarized below. First of all, however, the problem of discrimination against racial and linguistic minorities will be briefly discussed.

Racial and Linguistic Discrimination

While substantial numbers of white middle-class students cannot meet minimal competency standards, some evidence indicates that a disproportionate number of black and Hispanic students will not be able to meet the proficiency test requirements. This pattern has in fact occurred where competency testing programs have been implemented. For example, when the Palm Beach County, Florida, schools first used the Adult Performance Level Test published by American College Testing, 42 percent of the district's minority students failed in from one to five content areas, whereas only 8 percent of nonminority students did so.[6]

Recent U.S. Supreme Court decisions indicate that federal law requires proof of discriminatory purpose in order to invalidate a public school testing program that has a racially disproportionate effect. As a federal constitutional matter, the Supreme Court in *Washington* v. *Davis*[7] held that the disproportionate racial impact of a test (in this case, a police department's personnel test) was not sufficient to establish the unconstitutionality of the test without proof that it reflected a racially discriminatory purpose. The Court, however, stated that such disproportionate racial impact could be *evidence* of a discriminatory purpose. In *Regents of the University of California* v. *Bakke*,[8] the Supreme Court extended this discriminatory purpose standard of Title VI of the Civil Rights Act of 1964.

More important to California school districts is the fact that some of the relevant state constitutional standards are stronger than the federal constitutional standards. For example, the California Supreme Court in *Crawford* v. *Board of Education of the City of Los Angeles*[9] emphasized that since the 1963 decision in *Jackson* v. *Pasadena School District*, it has been the law "that in this state school boards do bear a constitutional obligation [under the state constitution] to take reasonable steps to alleviate segregation in the public schools, whether the segregation be *de facto* or *de jure* in origin."[10]

The basic problem is that denying black and Hispanic students diplomas for failure to pass a proficiency examination threatens to expose past discrimination and illegalities in many California school districts. This is not mere speculation. State and federal courts have found unconstitutional discrimination against racial and linguistic minorities in many California school systems,[11] and the adjudicated cases certainly do not encompass all the racial and linguistic minorities who have been subject to discrimination in California schools.

Consider, for example, a school district that—pursuant to *Lau* v. *Nichols*,[12] related HEW memorandums,[13] and state law—has implemented meaningful bilingual programs for limited- and non-English-speaking students at the elementary grades but has not provided adequate bilingual programs for the first group of limited- and non-English-speaking students scheduled to graduate after June, 1980 (this year's tenth graders). Hispanic students who cannot pass the test (required to be given in English) by June of 1981 might argue that denial of the diploma is illegal because it simply reflects unequal educational opportunities provided by the district. Similarly, a school district under federal or state court order to desegregate its schools might carry forward the effects of prior discrimination if it denies a diploma to minority students subjected to unequal educational opportunities. Black and other minority students in such a situation might argue that denying them a diploma is in effect "blaming the victims." In analogous situations (for example, cases involving ability grouping and voting rights), the federal courts have held that practices that carry forward the effects of prior racial discrimination are prohibited.[14]

---

[5] Copies of this article (hereafter referred to as "Competency Testing") are available from the Center for Law and Education, 6 Appian Way, Cambridge, MA 02138.

[6] Palm Beach *Post-Times*, May 10, 1977.

[7] 96 S. Ct. 2040 (1976).

[8] 46 U.S. Law Week 4896 (6/27/78).

[9] *Pacific Reporter* (Second series), Vol. 55 (1976), 28.

[10] Ibid., p. 34.

[11] See, for example, *NAACP* v. *San Bernardino Unified School District*, 551 P. 2d 48 (1976); *Spangler* v. *Pasadena City Board of Education*, 311 F.Supp. 501 (C.D.Cal. 1970); *Soria* v. *Oxnard School District Board of Trustees*, 386 F.Supp. 539 (C.D.Cal. 1974); *Hernandez* v. *Stockton Unified School District*, No. 101016 (Superior Court of San Joaquin County, October 1, 1974); *Flores* v. *El Centro School District* (Superior Court of Los Angeles, Complaint, October 9, 1975) (case pending).

[12] *Supreme Court Reporter*, Vol. 94 (1974), 786.

[13] See HEW memorandum "Identification of Discrimination and Denial of Services on the Basis of National Origin" (May 25, 1970) by Office for Civil Rights Director J. Stanley Pottinger. Also see subsequent memorandums: "Evaluation of Voluntary Compliance Plans . . ." (Summer, 1975) and "Application of Lau Remedies" (April 8, 1976).

Apart from these general statements, space will not allow a more detailed discussion of racial and linguistic discrimination because analysis must be geared to the specific situation in each district. Basically, any school district will fall into one of the following three categories: (1) with a court finding of prior discrimination; (2) with no such finding but vulnerable to such a finding if the issue were to be litigated; and (3) with no such finding since the district has provided equal educational opportunities to all of its students. There are many variations on these three situations, and each district should seek legal consultation to determine whether past practices in the district combined with its version of proficiency testing constitute racial or linguistic discrimination. Districts that have already been found to have discriminated, or that are vulnerable to such a finding, must be especially sensitive to the discriminatory potential of proficiency testing and should design their programs to account for possible problems.

These concerns about racial and linguistic discrimination, aggravated by other considerations about the fairness of proficiency testing for all students regardless of racial or linguistic background (discussed below), raise serious questions about the need to amend the law to account for these problems and possibly to postpone its effective date for some years. For example, the law could be amended to exempt school districts found to be subject to prior discrimination until such time as the effects of the discriminatory practices have been eliminated. With or without this kind of amendment, such districts should take steps to eliminate the effects of prior discrimination. The purpose of this article, however, is to offer school districts some guidance with respect to some of the problems they will face in trying to develop equitable programs that are consistent with the new law.

Except for some general comments about the field-testing of assessment procedures, this article will not specifically address the serious problems of racial and linguistic discrimination in any further detail due to the complexity and scope of these problems and the need for district-by-district determinations. It must be emphasized, however, that while the two-phase implementation procedure suggested below can help to make the proficiency testing program fairer for all students, it will not provide a remedy for the underlying problem of prior discrimination against racial and linguistic minorities in many school districts; therefore, other steps will be necessary in those districts. The Department of Education plans to issue an advisory to assist school districts in this area.

Adequacy of Notice and Phase-in Periods

The 1981 deadline in the California law means that the requirement will be first imposed upon students late in their secondary education with limited prior notice. The first class of students subject to the new law will have spent most of their years in the school system without notice or knowledge that passing a proficiency test would be a condition to acquiring a diploma. The school district in fact would have explicitly approved their progress by promoting them each year even though many of them did not have basic skill proficiencies. It is likely that many, if not most, of those students failing the test would have studied differently (and teachers taught differently) in earlier years had they been given such notice. The proficiency test is designed to ensure that minimal proficiency is acquired after twelve years of schooling, but the first group of students would not have received notice until their ninth year of school.

The exact date of notice will vary from school to school. In most districts there will be one date when students are given general notice of the proficiency requirement for a diploma and a later date when students are given notice of the specific performance objectives to be measured by the proficiency test. Students, parents, and teachers should be given notice of these performance objectives and the assessment procedures as soon as possible after they have been established.

Traditional notions of due process may require adequate prior notice of any rule that could cause irreparable harm to a person's educational or occupational prospects.[15] Whatever notice is considered fair in this situation, notice after most of one's educational program is completed may be inadequate, especially if the proficiency test is designed to measure knowledge and skills not previously taught in the district's classrooms. The importance of matching the assessment procedure with what has been taught in school is discussed in more detail in the next section.

Inadequate Matching of Test and Instruction

Most persons would agree that fairness requires that a school's curriculum and instruction be matched in some way with whatever is later measured by the test. In other words, the test would be unfair if it measured what the school never taught. This concept should be considered in terms of both curricular validity and instructional validity.

Curricular validity is a measure of how well test items represent the objectives of the curriculum. An analysis of curricular validity would require comparison of the test objectives with the school's course objectives. For example, if the curriculum was not designed to teach functional competency, it would be unfair to deny students their diplomas because they did not learn to be functionally competent. In such a situation failure on the proficiency test should reflect badly on the school for not offering an appropriate curriculum.

---

[14] For cases and discussion see footnotes 34–36 and the related text in "Competency Testing" (see footnote 5 on page K-2).

[15] For cases and discussion see footnotes 56 and 57 and the related text in "Competency Testing" (see footnote 5 on page K-2).

A competency test should also have what may be called *instructional validity*. Even if the curricular objectives of the school correspond to those of the proficiency test, some measure must be found to determine whether the school district's objectives were translated into topics actually taught in the classrooms. While a measure of curricular validity is a measure of the theoretical validity of the proficiency test as an instrument to assess the success of students, instructional validity is an actual measure of whether the schools are providing students with instruction in the knowledge and skills measured by the test. Instructional validity obviously does not require prior exposure of the student to the exact questions asked on the test, but it does require actual exposure to the kind of knowledge and skills that would enable a student to answer the test questions. Establishing instructional validity in some cases will be difficult; in others, it will be relatively easy. Some suggestions about how schools might do an initial check for the instructional validity of their assessment procedures are set forth below.[16]

It is important to note that content validity, as defined by the American Psychological Association,[17] does not ensure either curricular or instructional validity. They are related, but distinguishable, concepts. Content validity is a measure of how well test items represent the performance domain that the test purports to measure (for example, adult performance skills) but not necessarily a measure of how well the test items and performance domain represent either a particular school's curricular objectives or instruction. Instructional validity should be the central concern because content and curricular validity mean very little in this context if the test items are not representative of instruction actually received by the student.

The instruction and the test can be matched in one of these two basic ways: (1) design instruction to reflect the test; or (2) design the test to reflect instruction. Given the timetable required by the new law, most school districts may not have sufficient time to design and implement new curricula and instruction to match new test objectives. Since it is difficult in the short term to change instruction to fit the test, the first phase of the implementation procedure described below suggests designing the test to fit instruction.

Implementation Procedure: Phase I

In attempting to resolve the questions of legality and fairness raised by this article, the persons responsible for developing a proficiency program in any California school district may want to recommend to the members of the governing board that they adopt a two-phase implementation procedure. The first phase would emphasize that the proficiency standards to be met by the first class of students to graduate after 1980 be formulated on the basis of the curriculum and instruction to which these students have already been exposed for most of their educational careers in the district's classrooms. In other words, during the first phase the focus would not be on which proficiency skills the governing board and community think *should be* taught and emphasized in the district's schools but rather on those proficiency skills that *have been* taught and emphasized previously by the district. In some schools there will be no actual distinction between what should be emphasized and what has been emphasized, but in other schools the distinction will be substantial. The distinction will probably be reflected in the difference between basic literacy and numeracy skills emphasized by most schools and the adult-life skills emphasized by most competency tests.

This distinction between basic literacy/numeracy skills and adult-life skills is crucial. Adult competency tests usually go beyond basic literacy and numeracy skills because the tests are designed to measure an individual's ability to apply basic literacy/numeracy skills to necessary adult-life role activities, such as those of consumer, producer, and citizen.[18] The comparable terms used in this guide—"school context" skills and "functional transfer" skills—also reflect this important distinction.[19]

Examples of adult-life (functional transfer) skills include the ability to understand common indexes for comparison shopping; to understand the nutritional ingredients necessary for a balanced diet; to understand a contract for a car loan or home mortgage; to read a newspaper with comprehension; to fill out a job or loan application; to complete a tax form; to balance a checkbook; to follow a recipe in preparing a meal; to understand proper behavior and attitudes for getting and keeping a job; to use leisure time productively; and to participate as a citizen in the community, state, and nation.[20]

---

[16] See notes 25–28 and related text on pages K-6 and K-7.

[17] *Standards for Educational and Psychological Tests*. Prepared by the American Psychological Association. Washington, D.C.: American Psychological Association, 1974, p. 28.

[18] If the purpose of the proficiency test is to measure the minimal competence required in the adult world, the test should also have *predictive validity* or an acceptable substitute. Predictive validity requires a comparison of the predictions about each test-taker based on the test results with the actual functioning of the test-taker at a later time.

[19] Page III-9.

[20] As noted on page 398 of the *Phi Delta Kappan* article (see page K-2), the actual test questions should be subject to close scrutiny to avoid questions that (1) measure knowledge and skills not necessary in the adult world; (2) discriminate on the basis of race or culture; (3) involve mandatory personal or social behaviors that infringe upon an individual's freedom of choice; or (4) attempt to measure affective aspects of social responsibility, good citizenship, self-concept, and job preparedness that may not be measurable or teachable.

Some people do not think that the distinction between basic literacy/numeracy skills and adult-life skills is an important one since they believe that a student with basic literacy skills will have no difficulty passing an adult-life skills test even if he or she has not been exposed to adult-life skills in the classroom. They argue that students who can add and subtract a series of four-digit numbers on a basic numeracy skills test item, for example, will be able to do the same in the context of a tax form item from an adult-life skills test. However, many students, especially "borderline" students, will have difficulty with the kind of transference skills called for in an adult-life skills item. In fact, many of these students are probably borderline students *because* they have difficulty with transference. Therefore, school districts that plan to test for adult-life skills should have curricula and instruction that emphasize transference as well as the other knowledge and skills necessary to answer the adult-life skills items.

An adult-life skills item, such as adding and subtracting four-digit numbers on a tax form, is also more difficult than its basic numeracy components for other reasons, including the fact that (1) the forms usually require literacy as well as numeracy skills; and (2) an official form can be distracting and intimidating, especially if the students are not familiar with the form. Of course, it is possible to write a basic literacy or numeracy skill item which is more difficult than its adult-life skills counterpart or to make an adult-life skills test easier by allowing a lower cutoff score than for the literacy/numeracy skills test. But in general an adult-life skills test, designed to measure the same literacy and numeracy skills as a basic literacy/numeracy skills test, will probably be a more difficult test for most students; and a school's curriculum and instruction should account for this difference. Whatever the content or nature of the proposed test, school districts should provide for field-testing to refine the test and to determine its likely effects.

Greater curriculum revision and longer phase-in periods will be necessary where adult-life skills are being emphasized for the first time. Using a proficiency test that measures adult-life skills that were never taught in school as a basis for denying a diploma may violate due process of law. A proficiency test lacking curricular or instructional validity might violate substantive due process because when given such a test, the students are being penalized even though their poor performances on the test are not their fault.[21]

Proficiency standards based on what has already been emphasized in the classroom will obviously minimize the phase-in and instruction/test match problems mentioned above. The next question is whether proficiency standards based on what has already been taught meet the requirements of the new California law. Many persons in California have been assuming that the new law requires the kind of adult-life skills approach reflected by most competency tests. Such tests would certainly be consistent with the new law, but basic literacy/numeracy skills by themselves could be consistent with the requirements of the new law if a district's governing board decides that such proficiency skills provide students with "the knowledge, skills, and confidence required to function effectively in contemporary society" (see footnote 4). The specific statutory requirement is that the proficiency standards "shall include, but need not be limited to, reading comprehension, writing, and computation skills, in the English language, necessary to success in school and life experiences, and shall be such as will enable individual achievement to be ascertained and evaluated" (Education Code Section 51215).

This statutory provision sets the framework within which proficiency standards must be developed, but the framework is designed to provide each district with great discretion in determining its own educational goals, performance objectives, assessment procedures, cutoff scores, and so forth. This broad discretion on the part of individual districts is the central distinguishing feature of the new California law when compared to competency testing laws in other states, such as Florida.[22]

In the author's opinion a governing board would meet the basic requirements of the new law as summarized in the first paragraph of this article if it does the following: (1) concludes (after active involvement of parents, educators, and students[23]) that the reading comprehension, writing and computation skills that have been previously taught in the district are "necessary to success in school and life experiences"; (2) adopts by June 1, 1978, the basic literacy/numeracy skills already emphasized in the district classrooms as its proficiency standards; and (3) applies these standards as a diploma requirement for students who will graduate after June, 1980.

Thus, Phase I standards are essentially *past* standards—those that have already been emphasized in district classrooms. Students, parents, and teachers should still be notified of Phase I standards as soon as the standards are adopted. Even though the standards will not have changed, both the assessment procedures and the penalty for failure to meet the standards (denial of a diploma) are new; therefore, advance notice is essential.[24] Phase I standards should be retained until the new curriculum and instruction, if any, have been phased in and adequate notice is given to students, parents, and teachers. A new curriculum and new standards, if any, are the focus of Phase II. The planning for Phase II should begin simultaneously with the implementation of Phase I.

Implementation Procedure: Phase II

Given the severe nature of the penalty to be imposed on students who cannot meet the district's Phase I standards

---

[21] For cases and discussion see footnotes 72–74 and related text in "Competency Testing" (see footnote 5, page K-2).

[22] See the Educational Accountability Act of 1976, *Florida School Laws* (1976 ed.), Chapter 229.55 and those following, especially chapters 229.814, 230.2311, and 232.24.

[23] Community involvement in setting standards of proficiency is required by the new law. See Education Code Section 51215.

[24] For cases and discussion see footnotes 56 and 57 and the related text in "Competency Testing." Also see the related discussion in this article on page K-3.

(denial of a diploma), a school district might, as a policy matter, want to reevaluate its traditional standards and develop new, more appropriate standards. If the school district decides to develop a second phase, it might want to consider following the six basic steps suggested (on page K-2) as the basis for a model procedure—starting with substantial community involvement and concluding with a careful analysis of the psychometric and instructional validity of the assessment procedures. Some suggestions concerning community involvement and instructional validity follow.

Community Involvement

Since various groups within the community will have different expectations about what proficiency standards are necessary to function effectively in contemporary society, steps should be taken to ensure that community involvement is *representative* and *substantial*. The statutory requirement for community involvement prior to adoption of Phase I standards should also be met in developing Phase II standards: "Standards of proficiency shall be adopted by the governing board with the active involvement of parents broadly reflective of the socioeconomic composition of the district, administrators, teachers, counselors, and, with respect to standards in secondary schools, pupils" (Education Code Section 51215).

Written questionnaires and community survey forms can be helpful tools if they are written in simple language understandable by persons with varying levels of proficiency themselves. Such questionnaires and survey forms, however, almost by definition, self-select and narrow community involvement and are, therefore, likely to exclude large numbers of persons in lower socioeconomic groups. Thus, such forms should be supplemented or replaced by a series of community meetings at which the opportunity is presented to react to proposals and to suggest alternatives.

Whatever the approach—surveys, community meetings, or some other—the members of the community should be provided with enough information about this important and complex subject so that they can make intelligent choices. For example, the questions put to the community should not be written assuming adult-life standards and procedures since this is one of the crucial choices that has to be made. As mentioned previously, many persons in California have made the questionable assumption that the new law gives district governing boards no choice but to go beyond basic literacy/numeracy skills and emphasize adult-life skills in curriculum and assessment. If the reasons are properly explained, the community should understand and support the rationale for limiting the first phase of proficiency testing to knowledge and skills previously emphasized in the district's classrooms and delaying the second phase (if there is to be one) until the new educational goals and performance objectives can be sufficiently integrated into the curriculum and instruction. If so, the community and school personnel in the first phase can focus on which parts of the existing curriculum and instruction are "necessary to success in school and life experiences" (Education Code Section 51215) and would be fair to include on a proficiency test.

Approaches to Instructional Validity and Assessment

The assessment procedures, whether developed as part of Phase I or Phase II, should meet professional psychometric standards and have instructional validity as defined previously. This section will contain a description of some approaches to instructional validity and a consideration of direct performance measures as an alternative or supplement to the traditional paper-and-pencil test.

In developing or selecting an assessment instrument, school districts should take steps to ensure the instructional validity of the instrument. Although content validity is a distinguishable concept for reasons set forth earlier, it is sufficiently related to offer guidance in determining the instructional validity of a proposed instrument. One approach is suggested by the Educational Testing Service's study of the *National Teacher Examination*, which is given for certification purposes in North Carolina. The method used by the testing service involved an examination of the content domain of the *National Teacher Examination* in relation to the content domain that should be measured if scores are used for initial certification of teachers. The researchers determined that the content domain that the test should measure was the content of teacher education programs offered by North Carolina colleges:

> There are four sets of data that are measures of the correspondence between the content of the test and the content of the teacher training program: (1) the percentage of questions classified as content appropriate; (2) the number of content areas identified as omitted from the test; (3) the judgments about relative emphasis on specified subject matter in the test and in the teacher training program; and (4) the overall judgments with respect to whether the test parallels the curriculum. Criteria were established with respect to each of these sets of data to identify the degree of relationship between the test content and the program content. These criteria were applied individually to each test in the Common Examinations and each of the Area Examinations, and the interrelationships of criteria were also considered.[25]

Readers interested in this approach will want to refer to the complete report for details on how these determinations were made and what degree of match between test and program was considered sufficient.[26] This approach could be adapted to measure instructional validity by relating test content to instruction in specific schools (rather than to curriculum on a statewide basis). Furthermore, a sound approach would be to support judgments about instructional validity with evidence of actual instruction.

Schools will have to play a key role in the development of the assessment instrument even if, and perhaps especially if, they contract with an independent test publisher. Popham has noted the dilemma test publishers face with proficiency/competency testing because their tests will have to be based upon curriculum much more so than their traditional standardized tests, thereby making their instruments usable only to districts with very similar curricula.[27] This problem will be especially acute in California. The new law specifically precludes the State Department of Education from developing a statewide standard, making each district responsible for developing its own standards (Education Code Section 51217).

---

[25] *Report on a Study of the Use of the National Teacher Examination by the State of North Carolina.* Prepared by the Educational Testing Service. Princeton, N.J.: Educational Testing Service, 1976, p. 159.

[26] See especially the chart and related explanation at page 5 of the Educational Testing Service's report. The reference to the report here and in the text is for illustration purposes only and is not intended as an endorsement of the approach described in the report.

One way in which test publishers are attempting to solve this problem is to create "item pools." Districts that have specifications based on their learner objectives can match their specifications with those for which items and exercises have already been prepared by the test publisher. Whatever approach is used in test development or test selection, the district will need to make important determinations about whether the proposed instrument is sufficiently related to curriculum and instruction. The following advice that Melville offers school districts in selecting an achievement test is generally applicable to proficiency/competency tests:

> [T] he most important elements in good test selection [are]:
>
> How well does a test measure what it was selected to measure? Are the things being measured important? Is there a proper balance of areas covered? Are all the important areas to be taught included? *No one*—salesmen, neighboring school colleague, learned reviewer—can answer these questions. Only the classroom teacher and his department colleagues can supply the answers, and they can only do so by looking carefully at the actual test questions one by one.
>
> The task of making a careful examination of a test cannot be simplified very much. It is a time-consuming job. It can be more effectively accomplished, however, if approached systematically. One approach, applicable primarily to the selection of an achievement test, follows.
>
> The objective of the test analysis is to ascertain (1) what kind of materials are included in the test; and (2) the relevance of these materials to the teaching program. In order to appraise test items in a meaningful way, one should ask of each item: What particular skill, understanding, type of material, or subject matter does this item seem to be covering? Since judgments regarding the relevance of an item are necessarily subjective, a rough point-value scale for judging relevance should suffice. Items considered inconsequential or trivial would be rated 0 to 1; those closely related to local objectives and student capabilities would be rated 4 or 5. A work sheet ensures that the analysis is done systematically. Four column headings are needed: item number, item content, skills involved, and relevance of the item.[28]

The approach suggested by Melville could be adapted to make determinations of test relevance to curriculum and instruction. The district should ensure a sufficient match between curriculum and instruction by eliminating tests or test items that are not sufficiently matched with curriculum and instruction.

Whatever approach is used to determine the extent of the match between the test and instruction, the persons responsible will have to be knowledgable about the entire educational exposure (elementary and secondary levels) of the students taking the test. Thus, it will be necessary for educators at the elementary and secondary levels to cooperate in developing proficiency standards. Cooperation should also be considered in light of the new law, which states: "Designated employees of all school districts located within a high school district and one or more designees of the high school district shall meet prior to June 1, 1979, to plan for articulation of elementary and high school proficiency standards, and as necessary thereafter to review the effectiveness of such articulation procedures" (Education Code Section 51215).

A sound approach to instructional validity would not rely exclusively on the subjective judgments of a panel of administrators or teachers about whether specific test items were taught in the district's classrooms. These judgments should be supplemented with and supported by comparisons of test items and evidence of district curriculum and instruction. Such comparisons would include evidence such as curriculum guides, textbooks and materials used in the classroom, lesson plans, student homework samples, and perhaps interviews with selected students and teachers. A school district concerned about the instructional validity of its assessment procedure might want to arrange for an outside agency to examine such evidence and prepare a report of its findings and conclusions prior to final approval of the assessment procedure.

It should also be emphasized that districts are not limited to the traditional paper-and-pencil test. The new law simply states that the proficiency standards "shall be such as will enable individual achievement to be ascertained and evaluated." Education Code Section 51225, which was added by the new law, also provides:

> The governing board, with the active involvement of parents, administrators, teachers, and students, shall, by January 1, 1979, adopt alternative means for students to complete the prescribed course of study, which may include practical demonstration of skills and competencies, work experience or other outside school experience, interdisciplinary study, independent study, and credit earned at a postsecondary institution.

Just as "practical demonstration of skills and competencies" may be appropriate for the prescribed course of study, so too practical demonstration of proficiency skills may be an appropriate and even preferred assessment procedure. For example, if the purpose of a proficiency test is to measure a student's ability to perform adequately in certain real-life situations, an applied performance measure may be more accurate than a paper-and-pencil test.

Madaus and Airasian write that many of the minimal cognitive competencies for graduation involve application of basic literacy and numeracy skills to real-life situations (for example, checking the accuracy of bills and sales slips, using the public library, using the town and state offices). "These competencies are most validly measured by the most direct means possible, situational or performance examinations which determine if the student can actually perform the behaviors."[29] Although they recognize that direct measurement is often costly and time-consuming, the two authors conclude that "indirect paper-and-pencil tests, measuring knowledge about the competency areas, are not enough. Any indirect, or surrogate, measurement must be validated against direct performance measures."[30] Serious questions about fairness and legality could be raised if a student could show that he or she was denied a diploma on the basis of performance skills that he or she could demonstrate by direct assessment but not by the indirect paper-and-pencil method. This problem also suggests that if a student cannot pass a paper-and-pencil proficiency test adopted by the school district, then the district may want to give that student a direct performance measure to be sure that he or she does not have the requisite skills before denying him or her a diploma.

---

[27] W. James Popham, "Customized Criterion-Referenced Tests," *Educational Leadership* (January, 1977), 258-59.

[28] S. Melville, *Selecting an Achievement Test* (four-page summary adapted from script of film with same title, available from the Cooperative Test Division, Educational Testing Service). Princeton, N.J.: Educational Testing Service, n.d.

Field-testing of the proposed test can serve several important purposes (see page III-13), including determination of its likely effects on blacks, Hispanics, and the student population as a whole. If substantial or disproportionate numbers of students in any category cannot pass the proposed test, the district may want to take another look at the adequacy of the match between the test and instruction in the district's classrooms and at the reasonableness of its proposed cutoff score. Where limited- and non-English-speaking students have difficulty with the field test, the district should give the test in the student's native language in order to determine whether the student's difficulty on particular test items is with language or the skills measured by the items. Although the law (Education Code Section 51216) requires the formal assessments to be given in English, it also permits native language assessments for diagnostic purposes; such assessments can be used to help provide low-scoring students with appropriate remedial instruction before the final assessment in English.

As mentioned above, the central feature of the new California proficiency law is the broad discretion given to each school district to determine its own educational goals, performance objectives, assessment procedures, cutoff scores, and so forth. This broad discretion, of course, carries with it a corresponding responsibility to design within the statutory framework a proficiency program that is fair to all students in the district.

Some Concluding Cautionary Notes

The suggested two-phase implementation procedure rests on a number of legal and policy conclusions discussed in this article. Perhaps the most important of these conclusions are the following:

- The need for some kind of match between test and instruction (instructional validity)
- The importance of the distinction between measures of basic literacy/numeracy skills and adult-life skills

The two-phase implementation procedure will not seem compelling to readers who disagree with the rationale presented in support of these conclusions.

For those readers who agree with the conclusions and supporting rationale, the two-phase implementation procedure will help to ensure fairness for all students and will thereby reduce the risk of legal challenge. This approach by itself, however, cannot resolve all concerns about fairness and legality. The most serious of these concerns is the potential discriminatory effect of the new proficiency law on racial and linguistic minorities in many California school districts. These and other problems affecting students regardless of racial and linguistic background raise serious questions about the need to amend the law to account for these problems. With or without statutory amendment, districts will have to be especially sensitive to the potential for racial and linguistic discrimination when developing and implementing proficiency assessment programs.

The minimal proficiency/competency requirement as a prerequisite to a high school diploma is a new phenomenon in most states. Therefore, with the exception of racial and linguistic discrimination, it is difficult to identify the strongest legal arguments for or against it. It is even more difficult to predict the judicial response. The potential for unfairness, however, combined with the severe nature of the penalty (which, in effect, might condemn a student to second-class citizenship) makes legal challenge likely and makes special care by school districts essential.

In conclusion, the persons responsible for developing proficiency standards in any California school district may want legal counsel to review the approach to be proposed to the governing board. If the approach differs from the one suggested in this article, they could ask legal counsel to review this article and the article "Competency Testing" (see page K-2) and form an opinion as to the likelihood and seriousness of legal challenge. If the proposed approach is the kind of two-stage procedure recommended in this article, they could ask legal counsel to review the proposal with reference to this article as well as "Competency Testing." This use of "Competency Testing" (or other legal analyses, if available) is recommended because legal counsel should be able to form an opinion faster (thus less expensively) if he or she can consider the research undertaken, issues identified, and opinions formed by other lawyers.

---

[29] G. Madaus and P. Airasian, "Issues in Evaluating Student Outcomes in Competency-Based Graduation Programs," *Journal of Research and Development in Education* (Spring, 1977), 86.

[30] Ibid.

Appendix L Setting Differential Standards

The proficiency provisions added to California's Education Code by Assembly Bill 3408 (Chapter 856, Statutes of 1976) and Assembly Bill 65 (Chapter 894, Statutes of 1977) require that all school districts adopt standards of proficiency in the basic skill areas of reading comprehension, writing, and computation. As a result of this legislation, subsequent to June, 1980, students may receive a high school diploma only after demonstrating proficiency up to the locally adopted standards.

Beginning in 1978-79 for secondary grades, and in 1979-80 for elementary grades, the progress of students toward meeting proficiency standards shall be assessed at least once in grades four through six, once in grades seven through nine, and twice in grades ten through eleven. Once a student has met the prescribed standards for graduation from high school, his or her progress need not be reassessed.

The purpose of the proficiency legislation was threefold: to create a public dialogue regarding high school graduation standards, to restore meaning to the high school diploma, and to encourage schools to focus early attention on pupils who are having problems in the basic skill areas. While the intent of the law was to ensure that pupils graduating from high school demonstrate mastery of the basic skills necessary to function effectively in an adult society, the Legislature recognized that a single local standard of proficiency might not be appropriate for all pupils (see Section I of the *Technical Assistance Guide for Proficiency Assessment* for a complete analysis of California's proficiency statutes).

Reflecting this intent, additional features of the law include the involvement of the community in the setting of local standards, a requirement that districts make available to students alternative means to complete the prescribed course of study, and a district option to set "differential standards" for some special education pupils with diagnosed learning handicaps or disabilities.

Sections 42 and 43 of AB 65 included an extension of proficiency assessment requirements into the elementary grades to facilitate early identification of pupils needing remediation in the basic skills. To link pupil objectives for the elementary grades to the secondary graduation standards, elementary and high school districts are required to meet to articulate their standards.

Elementary and unified districts also have the option to set differential standards for eligible pupils in the elementary grades. The consequences of not adopting differential standards for special education pupils at the elementary level are not so great as the consequences of not adopting such standards at the secondary level. However, requiring all special education pupils to address the regular elementary standards will have important implications for instruction and may constitute unfair treatment of some pupils. Therefore, districts are urged to consider carefully the adoption of differential standards for pupils in elementary grades as well as the need to articulate these standards with those adopted for students in secondary grades. Whatever the district determination, special education pupils and their parents should be informed as early as possible and kept up to date on pupil proficiency standards in the basic skills and likely performance requirements for graduation.

This appendix has three purposes: (1) to describe the statutory changes set forth in AB 2043; (2) to explore district options and responsibilities for the setting of differential standards (including some suggestions for determining a pupil's eligibility for differential standards); and (3) to clarify the requirements in AB 1250 and AB 3635 pertaining to alternative means of instruction and modes of assessment for special education pupils.

In 1974 the Legislature, through Assembly Bill 4040 (Chapter 1532, Statutes of 1974), directed the Department of Education to develop and implement the Master Plan for Special Education for the state. The Legislature modified and extended the Master Plan through Assembly Bill 1250 (Chapter 1247, Statutes of 1977), which called for a four-year phase-in period for statewide implementation of the plan. In 1978 the Legislature passed Assembly Bill 3635 (Chapter 402, Statutes of 1978) which modified some of the program requirement provisions of AB 1250.

On September 19, 1978, the Governor signed Assembly Bill 2043 (Chapter 893, Statutes of 1978), which included substantial changes in the proficiency provisions of the Education Code relating to the setting of differential standards for pupils with diagnosed learning disabilities.

To help school districts understand their options and responsibilities toward pupils enrolled in special education programs, a comparative analysis of the Education Code sections relating to proficiency assessment for special education pupils is provided in the chart "Comparative Analysis of the Proficiency Provisions of AB 65 and AB 2043 and the Related Instructional Provisions of AB 1250 and AB 3635 as They Relate to Special Education Pupils," found on page L-3. The analysis contains the text of each section of the Education Code concerning proficiency requirements for pupils in special education programs. Also included is an explanation of the contents of the code sections and the modifications that have been made to them.

Local Option to Establish Differential Standards

A key feature of California's pupil proficiency law is the requirement that the adoption of proficiency standards and assessment measures be the responsibility of each school district's governing board. This provision reflects the Legislature's view that the school district is the most appropriate level for setting proficiency standards, course requirements for high school graduation, and differential standards for pupils with diagnosed learning handicaps or disabilities. The following section contains clarification of the differential standards option in three areas:

- WHO is responsible for providing differential standards?
- FOR WHOM may differential standards be written?
- HOW are differential standards written?

WHO is Responsible for Providing Differential Standards

First, the school district governing board has the responsibility to determine whether or not differential standards will be provided. Second, the board is responsible for defining, within the context of the law, for which pupils differential standards may be written. Technically, the board has the option of defining differential standards by groups of handicapping conditions rather than on an individual basis (see discussion under "FOR WHOM Differential Standards May Be Written"). Third, the board has the option of defining the specific content of local differential standards. However, once the board makes the decision to provide for differential standards, it seems most advisable to delegate the task of defining for whom such standards are needed and the content of the standards to either the district or the school special education assessment teams, which are likely to be most knowledgeable about special education pupils and available services in the district. If the governing board desires complete districtwide consistency in setting individual differential standards, the *district-level* special education assessment team may be the most appropriate group to identify eligible pupils and write differential standards.

Whether the governing board acts itself or delegates the development of differential standards to the district-level or school special education assessment teams, the legislative intent is that the differential standards be determined on an *individual basis.*

Districts may conceivably choose to set "group" standards for pupils with similar disabilities. However, a group approach to establishing standards for handicapped pupils is likely to be inequitable since disabilities are not uniform even among persons with the same type of handicap. Because of the individual needs of pupils, actions which treat those needs too similarly may be viewed as arbitrary. Further, individual determinations are consistent with the Individualized Educational Program (IEP) mechanism provided for in the California Master Plan for Special Education. The Department of Education recommends individual determinations for establishing both pupil eligibility for differential standards and the content of such standards.

Districts that choose *not* to set differential standards for pupils enrolled in special education programs should make provisions to ensure that those pupils have been given a *reasonable* and *equitable* opportunity to demonstrate proficiency in the district's regularly adopted standards. Consideration should also be given to the fairness of setting what may be unrealistic expectations for special education pupils who, even with intensive remediation activities, are not likely to meet the district's regular standards.

Distributed 12-78

Comparative Analysis of the Proficiency Provisions of AB 65 and AB 2043 and the Instructional Provisions of AB 1250 and AB 3635 as They Relate to Special Education Pupils

Proficiency provisions relating to special education pupils			Related instructional provisions	
AB 65	**AB 2043**	**Analysis**	**AB 1250 as amended by AB 3635**	**Analysis**
51215. . . . Differential standards and assessment procedures may be adopted for pupils with diagnosed learning disabilities. (Repealed by AB 2043) [For the complete text and an analysis of the proficiency provisions of AB 65, see Section I of the *Technical Assistance Guide for Proficiency Assessment.*]	**51215. Differential standards and assessment procedures may be adopted for pupils who:** **(a) Are enrolled in special education programs pursuant to Part 30 (commencing with Section 56000),** ***and*** [emphasis added] **(b) Have diagnosed learning handicaps or disabilities that would preclude them from attaining the district's regular proficiency standards with appropriate educational services and support.** **Any such differential standards shall be included in the individualized education program developed for the pupil pursuant to Part 30 (commencing with Section 56000). For purposes of this section, the definition of pupils with diagnosed learning handicaps or disabilities is not limited to pupils identified pursuant to sections 56600, 56601, or 56302.**	AB 65 For an analysis of the proficiency provisions of AB 65, see Section I of the *Technical Assistance Guide.* AB 2043 Section 14 of AB 2043 amended Education Code Section 51215 to clarify the definition of pupils for whom differential standards may be provided. The major changes from the AB 65 requirements are as follows: • Retention of the local option to set differential standards • Limitation of the availability of differential standards to pupils enrolled in special education programs • Expansion of the definition of diagnosed learning handicaps or disabilities beyond the category of "learning disabled" exceptionality to include special education pupils whom the district has identified as unable to meet the district's regular proficiency standards as a result of a learning handicap or disability • Mandatory inclusion of the differential standards, if established, in the Individualized Educational Program	**56336.5(c).** A secondary grade level pupil's individualized education program shall also include any alternative means and modes necessary for the pupil to complete the district's prescribed course of study and meet or exceed proficiency standards for graduation, in accordance with sections 51225 and 51225.5*	The California Master Plan for Special Education (AB 1250) *requires* that special education pupils in Master Plan districts be provided with alternative means and modes necessary to complete the prescribed course of study and demonstrate proficiency in the district's regular proficiency standards. As noted above, local governing boards also have the *option* to provide differential standards for some special education pupils. These standards will be most appropriately defined on an individual basis, along with procedures for instruction (means) and assessment (modes) within the Individualized Educational Program.

---

*There is an apparent error in Section 56336.5(c) of AB 1250 as amended by AB 3635 since the section contains the reference to Section 51225.5, which was repealed by AB 65. The reference should be to Section 51215, which AB 65 added to the Education Code. Therefore, a district's prescribed course of study and standards of proficiency in the basic skills should be in accord with Section 51225 (course of study) and Section 51215 (proficiency standards).

FOR WHOM May Differential Standards Be Written?

As mentioned earlier, recent amendments to the Education Code clarify the criteria for identifying pupils for whom differential standards may be provided. Both of the following criteria must be met by each pupil:

1. Enrollment in a special education program pursuant to Part 30 (commencing with Section 56000) of the Education Code
and
2. Identification as having a "diagnosed learning handicap or disability" that would preclude the pupil's attaining the district's regular proficiency standards with appropriate educational services and support.

The first provision, requiring that a pupil be enrolled in a special education program to be eligible for differential standards, limits the availability of differential standards to students who have been assessed by the local special education team and are currently receiving services.

The second provision reflects the intent that the identification of special education pupils eligible for differential standards be made, as much as possible, on an individual basis rather than a group basis in accordance with the traditional funding categories of "learning disabled." Rather than a narrow technical definition, the Legislature sought to provide a practical definition based on whether or not a pupil's diagnosed learning handicap or disability would preclude his or her attaining the district's regular standards with appropriate services and support. As mentioned in the comparative analysis, for purposes of this section, the definition of pupils with diagnosed learning handicaps or disabilities is explicitly not limited to pupils identified pursuant to sections 56600, 56601, or 56302 of the Education Code. Special education pupils who are integrated into the regular program for part or all of the day are also eligible for differential standards.

In making a determination of whether students' diagnosed learning handicaps or disabilities are "such as would preclude them from attaining the district's regular proficiency standards," the local assessment team is offered the following recommendations:

1. Examine the pupil's most recent annual assessment. What has been the pupil's general academic and personal growth pattern? What is the pupil likely to be able to attain by the end of his or her senior year in high school?
2. Examine the district's regular proficiency standards and passing scores. Are the district standards likely to be attainable for the pupil? If so, the pupil should be given the opportunity to demonstrate proficiency in the district's regular standards. If the assessment team is uncertain, the special education pupil might be administered the district's regular tests to determine the need for differential standards or assessment procedures.
3. Given the amount of time before the pupil's proposed graduation date and the regular and special educational services that the district is able to provide during that period, determine the likelihood that the pupil will have a reasonable opportunity to meet the district's regular standards.

Differential performance standards are subject to revision when the pupil's needs are reviewed at the annual assessment. Even if differential standards are established, the pupil and his or her parents need to be informed of the pupil's right to attempt the district's regular standards without forfeiting the right to meet the differential standards.

How long may differential standards be maintained? In keeping with the philosophy of special education services, some pupils, for example, may elect to leave special education services to participate in a Regional Occupational Program (ROP), a sheltered workshop, or a similar program. If a pupil is removed from special education services to enroll in another program, maintaining the differential standards may be appropriate, provided that the differential standards were written *while the pupil was receiving services.*

On the other hand, students should not be "cycled through" special education assessment to qualify for differential standards and then be returned to the regular program. Instead, in keeping with the Master Plan's philosophy of educating the pupil "in the least restrictive setting," learning disabled pupils who have been identified as eligible for differential standards should not be penalized for moving out of special education programs by being required to demonstrate proficiency in the district's regular standards. The final Individualized Educational Program (IEP) of such a pupil should reflect the fact that the differential standards will be maintained through high school graduation.

The chance always exists that some low-achieving pupils who are not enrolled in special education programs will be unable to demonstrate proficiency in the basic skills up to the district's adopted standards. The pupil proficiency law requires early identification of pupils not demonstrating proficiency, a conference with the pupils' parents, and focused remediation activities. *To best serve the low-achieving pupil who is not enrolled in special education services, districts are strongly advised to begin diagnostic assessment in the early elementary grades and to provide remedial instruction as soon as possible for pupils who do not demonstrate sufficient progress toward proficiency.*

Special education pupils, like other pupils, must be given adequate notice of proficiency standards they must meet to receive a diploma. Further, special education pupils for whom differential standards have been provided early in their high school career but who elect to be released from special education services (for example, to enter an ROP program) should remain eligible for a continuation of their differential standards, as long as the local team has documented the need.

HOW Are Differential Standards to Be Written?

Differential standards are pupil proficiency standards that are different from the districtwide proficiency standards required by Section 43 of AB 65. While all pupils should be given the opportunity to demonstrate proficiency in the district's regular proficiency standards, those standards may not be appropriate for all pupils.

For many special education pupils, the regular proficiency standards will not be appropriate. The content of the differential standards, like the eligibility for such standards, will be most easily defended if they are determined on an *individual* basis. The suggested guidelines for identification of pupil need for such standards should also apply to the development of the content of the standards.

Those responsible for writing the standards should review the pupil's educational history, determine the amount of time remaining before projected graduation from high school, and identify the special education services and support that a pupil is currently receiving and is likely to receive.

Districts may first want to examine the regular proficiency standards. What are the skills a pupil is required to master enroute to mastery of the district proficiencies? By conducting a "task analysis" of each of the district's regular competencies and measures, the enabling, or enroute, skills can be identified. The district may combine these enabling skills with appropriate measurement procedures to produce appropriate differential standards. As the pupil demonstrates progress toward proficiency in the enabling skills, the local team may suggest that the pupil meet the district's regular proficiency standards.

If students are not likely to master traditional academic skills, or even subskills of the regular proficiencies, the district may wish to consider defining differential standards that employ "real-life" skills. For example, instead of requiring mastery of enroute reading and writing proficiencies, the differential standards may require the pupil to demonstrate understanding of oral instructions or to demonstrate the ability to ride public transportation without seeking adult assistance.

The differential standards are likely to take the form of one of the following:

- Modifications of the regular standards
- A combination of enabling skills for the regular standards
- A lowered passing score on the regular measures
- An entirely different set of standards and measures

The most useful and defensible performance standards contain specific definitions of the conditions under which the pupils' skill attainment will be measured. In addition, they should contain a definition of the type, content, and anticipated level of pupil performance for each designated area. The more specific the criteria, the easier it will be to judge a pupil's performance and to evaluate and revise the standards, if necessary.

The provision of a written Individualized Educational Program (IEP) is a major component of the California Master Plan for Special Education (AB 1250) and PL 94-142, the Education for All Handicapped Children Act of 1975. The IEP is written jointly by school staff, the pupil's parents, and, when appropriate, the pupil. The plan is developed after assessment of the child's individual capacities by a specified team of certified school personnel and the pupil's parents.

For districts that choose to provide differential standards, the standards must be included in the IEP. By requiring the incorporation of differential standards in the IEP, the Legislature again emphasized the need for determination of *individual*, rather than group, performance standards. The requirement for individual assessment of special education pupils and of an annual reassessment provides the mechanism for determining whether the special education pupil, in fact, meets the performance criteria.

In the development of an IEP for an elementary pupil, local teams are encouraged to consider both the long-term capabilities of the pupil as well as the annual instructional objectives. Criteria were suggested in the previous section for assisting the team in determining which pupils qualify for differential standards. A well-written IEP for elementary pupils will also help the secondary personnel who are responsible for documenting the pupils' proficiency for graduation from high school.

Districts must ensure that the skills that the curriculum and instruction are designed to cover match the skills needed to meet the proficiency standards. Failure to ensure such a match may result in legal problems since pupils whose skills do not meet the standards will be denied high school diplomas.* Whenever possible, differential standards should closely reflect the district's regular proficiency standards. Whether the district adopts academic skills or real-life skills as differential standards, the curriculum and instruction to which the pupils are exposed must reflect the type of standards and measures used to determine proficiency for graduation.

Each special education pupil in California is required to have an IEP, which forms the basis of the pupil's learning experience because it contains (1) the objectives for the pupil's achievement; and (2) the services the district will provide to the pupil. In Master Plan districts the secondary student's IEP must also include the means of instruction and the modes of assessment for completing the district's regular proficiency requirements. Although required only in Master Plan districts, the Department recommends that the IEP of all special education pupils include the proposed means of instruction and the mode for assessing the pupils' attainment of whatever proficiency standards are required.

Differential Modes of Assessment and Means of Instruction

The *mode* of assessment is the method by which an individual pupil's progress toward a stated standard is measured. The *means* of instruction are the techniques used to teach a pupil. The Master Plan requires, when appropriate, provision of alternative modes of assessment and means of instruction to allow special education pupils to receive instruction and demonstrate proficiency in a district's regular proficiency standards. While non-Master Plan districts have the *option* to provide differential standards of proficiency and modes of assessment for special education pupils, Master Plan districts are *required* to provide differential modes of assessment and means of instruction necessary for pupils to meet proficiency requirements.

The most typical mode of assessment used in schools is the pencil-and-paper test. Other modes of assessment include oral measures, simulated performance measures, and direct performance measures. Allowing the student to respond to questions orally, reading the test to a pupil and allowing the pupil to respond on a typewriter, extending the normal time limit, or asking the pupil to perform a task and rating him or her against stated criteria all constitute differential modes of assessment.

Differential modes of assessment of pupil progress toward the district's regular proficiency standards may be used for any student, not just for those in special education programs. The only stipulation in using a differential mode of assessment is that it be designed to measure accurately and reliably the same skills at the same level as the corresponding area of the district's regular proficiency assessment measure.

For some special education pupils, the use of alternative modes of assessment to address the regular standards will suffice. However, for other pupils an alternative mode of assessment may not be enough. For those students districts may wish to provide differential proficiency *standards* as well as differential *modes* of assessment and *means* of instruction.

Summary

The intent of the pupil proficiency provisions in the Education Code is to ensure that students graduating from high school will demonstrate proficiency in basic skills necessary to further success in school and in adult life. The provision for "differential standards" is included because the Legislature recognized that pupils with diagnosed learning handicaps or disabilities may not be able to meet the district's regular proficiency standards

For pupils in special education programs, the law gives governing boards the option to establish differential standards of proficiency. The local board must decide initially whether to provide such differential standards. Having decided to do so, the board must then develop a procedure for identifying pupils who will be eligible to be judged by such standards.

---

*See Appendix K, "Developing Proficiency Programs in California Public Schools: Some Legal Implications and a Suggested Implementation Procedure," distributed in August, 1978, as an addition to the *Technical Assistance Guide for Proficiency Assessment.*

The language of the law reflects the legislative intent that boards adopt a broad definition of "learning disability" for prescribing differential standards. A board should designate the local special education team to identify pupils "having a diagnosed learning handicap or disability such as would preclude them from attaining the district's regularly adopted proficiency standards." The local team is likely to be in the best position to make individual determinations regarding a pupil's need for differential standards and the specific content of the standards. If a differential graduation standard is recommended, graduation performance requirements must be included in the IEP.

The setting of differential standards by an elementary district should also be part of the articulation process between the elementary and the high school districts. Once a district makes a determination of need for a differential standard, the Department recommends that parents and pupils be kept informed of pupils' progress and their option to try to meet the district's regular proficiency standards without losing their eligibility to be assessed in relation to the differential standards. Finally, boards that elect not to provide differential standards will need to give special attention to ensure that special education pupils have a *reasonable* and *equitable* opportunity to demonstrate proficiency in relation to the regular standards.

Appendix M Bias and Fairness in Proficiency Assessment

The purpose of this paper is to assist school districts in understanding the issues of bias and fairness in proficiency assessment procedures, specifically as these procedures relate to pupils of diverse cultural, racial, and linguistic backgrounds. While the suggestions provided should help districts avoid bias in proficiency assessment, the State Department of Education cannot, of course, guarantee that following the recommended steps will ensure districts legal protection in this regard.

Background

In September of 1976 the California State Legislature passed Assembly Bill 3408, requiring that all districts maintaining secondary schools adopt standards of proficiency in the basic skill areas of reading comprehension, writing, and computation. As a result of this legislation, subsequent to June, 1980, no student may receive a high school diploma without demonstrating proficiency in the skills for which the district adopts standards.

In September of 1977 Assembly Bill 65 extended the provisions of AB 3408 by requiring that districts maintaining elementary schools adopt standards of proficiency that are articulated with those of the appropriate secondary school and that students' proficiency be assessed in relation to these district-adopted standards once in grades four through six, once in grades seven through nine, and twice in grades ten through eleven. For a student having difficulty meeting these standards, a conference is to be held, involving the principal, the teacher, the student's parents, and, where appropriate, the student to discuss the results of the assessment and to describe the required supplementary instructional program. An additional feature of California's proficiency law includes the involvement of teachers, students, parents, and other community members in the setting of local standards.

While California's proficiency assessment law was designed with the intention of ensuring that students demonstrate proficiency in basic skills, it was not meant to preclude students' obtaining diplomas. The provisions of AB 65 requiring periodic assessment, parent conferences, and remedial instruction in basic skills are all procedures designed to ensure that each student is afforded every opportunity to meet the requirements for obtaining a high school diploma.

Many educators are concerned, however, that a disproportionate number of minority students may not be able to meet the district-adopted standards of proficiency. If they are not able to meet the standards, several questions arise: (1) "Is a district's proficiency test biased?" (2) "How can one determine whether it is biased?" (3) "If it is biased, what can a district do about it?" A further question that should be asked is whether or not a proficiency test, as it is being used, is "fair."

This paper contains a discussion of both test bias and test fairness, specifically as they relate to proficiency assessment, and a description of two approaches to identifying test items that may be biased. It should be emphasized that the problems involved in avoiding bias and unfairness in testing are complex and difficult and that at this time there are no clear-cut solutions to the problem. Districts can, however, take reasonable steps to avoid bias and ensure fairness; this paper is designed to offer suggestions to assist in the process. The following sections contain definitions of both bias and fairness as they relate to proficiency assessment.

Bias

Bias in testing is defined in several ways because there is no consensus on a single "correct" definition. The definition of bias which seems most appropriate to proficiency assessment and which will be used throughout this paper is as follows: "An item of a test is said to be biased for members of a particular group if, on that item, the members of the group obtain an average score which differs from the average score of other groups by more or less than expected from performance on other items of the same test."[1] In other words, a biased test item is one that contains a characteristic that causes one group to respond differently to that item than would another group. An example is the following test item:

> What would you use to measure water for making one serving of instant soup?
>
> A. A teaspoon
> B. A quart
> C. A measuring cup
> D. A gallon

"One serving" to most people in the majority anglo culture would mean approximately one cup or the amount that would be consumed by a person at a meal. However, for some Spanish-speaking persons "one serving" may mean one mouthful or one spoonful. In responding to the test item, Spanish-speaking students might select the "wrong" response option because of a difference in cultural background rather than a lack of understanding of units of measurement. A later section of this paper contains suggestions for a procedure to use in identifying and revising biased test items.

There is another definition of bias, which is not considered appropriate for use in proficiency testing. According to that definition, any test that results in a systematic difference in scores among groups is biased. If one were to use this definition of bias, all tests would be biased because some group will always score systematically lower than another group. Consider, for example, a situation in which a district has identified and revised or deleted biased items from its proficiency test and students from minority or low-income groups still score systematically lower than do students from middle- or high-income groups. This difference in scores may not be the result of biased test items but rather the effect of a history of differential treatment and opportunities afforded persons from low-income or minority groups.

This systematic difference in scores among groups may indicate that for a variety of reasons, the educational system has not been successful in meeting the academic needs of some segments of the student population. To claim that the problem lies solely with the tests is to imply that minority students indeed are proficient in the basic skills and the tests are simply not reflecting this proficiency. The following section contains a discussion of how a test can be used fairly even when there is a systematic difference in scores among groups.

Fairness

Whereas bias refers to how a test is constructed, fairness refers to how a test is used. Even though values and judgments enter into estimates of fairness, decisions regarding the fair use of a test must be made irrespective of the presence or absence of bias. Before the discussion of fairness in proficiency tests, two examples are provided to clarify what is meant by test fairness.

Example

A test for a contractor's license favors those with experience and training in construction. Persons who do not have experience and training in construction will not perform as well on this test as those who do. This test is biased because it is more difficult to pass for those without experience; however, it is used fairly. On the other hand, if minorities do not do as well on the test because of closed unions that deny them the experience to compete equally, then using this test to grant contractor's licenses is unfair.

Example

A test of computation skills is used to determine which students will be required to take a remedial math class. The test contains items designed to measure consumer math skills. Students in grades six and seven perform poorly on the test because consumer math is not taught until grade eight. It is also not taught in the remedial course. Unless these consumer math items are deleted from the test or unless students are taught consumer math prior to taking the test, using the test to determine who is required to take a remedial math course would be considered an unfair use of the test.

It is also possible that some students possess the computation skills required to pass the test but fail because they are unable to read the questions. In this event requiring a remedial math course would be both inappropriate and unfair to the student. An approach to overcoming such a problem is to remove the need for reading skills by either reading the questions to the student or otherwise designing the test so that no reading is required to understand the questions.

In attempting to judge the fairness of proficiency tests, districts must be especially careful to distinguish between aptitude and achievement tests. An aptitude test is designed to predict an individual's potential for future achievement; therefore, the questions or items for an aptitude test are specifically selected so that they are not influenced by instruction. Achievement tests, however, are designed to identify what a person does or does not know and what skills a person does or does not possess. Achievement tests should, therefore, be sensitive to and reflective of instruction.

---

[1] T. A. Cleary and T. Hilton, "An Investigation of Item Bias," *Educational and Psychological Measurement*, Vol. 28 (1968), 61–75.

The reason this distinction is important lies in the consequences of the interpretation and use of the test results. If an aptitude test is used to predict a person's potential, a poor score is an indication that any additional educational effort might be wasted. However, a poor score on an achievement test is an indication that instruction has not been successful and that further instruction in that area is necessary. In other words, while a poor score on an aptitude test may result in a limiting of opportunities, a low score on an achievement test should result in renewed efforts to provide appropriate and effective instruction.

California's proficiency law requires that districts provide supplementary instruction in basic skills for any pupil who does not demonstrate sufficient progress toward mastery of these basic skills. This assessment and instruction cycle is to continue until the pupil has been given repeated opportunities to achieve mastery. This use of proficiency tests for identifying students' academic weaknesses and for providing focused, supplementary instruction is unquestionably fair.

On the other hand, if a disproportionate number of minority students are unable to pass the proficiency tests and are, therefore, denied a high school diploma, then the proficiency assessment may be carrying forward the effects of prior discrimination. In other words, minority students may be denied access to many opportunities because of unequal treatment in the past. Districts that have a history of discrimination should be particularly attentive to the suggestions provided in the remainder of this paper.

Final determinations regarding the fairness of proficiency assessment may ultimately be made by the courts. In the meantime districts are urged to make every possible effort to ensure that each student has been provided numerous opportunities to demonstrate proficiency up to the district-adopted standards. The following suggestions are provided to assist districts in identifying and removing biased items from their proficiency tests and in using test results fairly.

Suggested Steps for Avoiding Bias and Ensuring Fairness

A paper entitled "Developing Proficiency Programs in California Public Schools: Some Legal Implications and a Suggested Implementation Procedure" was distributed to districts by the State Department of Education in August, 1978.[2] While that paper contains a discussion of some legal concerns regarding racial and linguistic discrimination in proficiency assessment, it also contains a discussion of steps that districts can follow to promote fairness in assessment. Those steps will be only briefly outlined here; the reader is referred to the original paper for more detail. Additional steps for avoiding bias and ensuring fairness are also provided below. Some of these steps are required by law; others are merely suggestions. Districts should be careful to review the legal requirements as described in Section I of the *Technical Assistance Guide.* (See footnote 2.)

Step 1. Give adequate notice regarding new graduation requirements. Districts should notify students and parents of proficiency standards and assessment procedures as soon as possible after they are adopted.

Step 2. Match the skills on proficiency tests with those covered in the current curriculum and instruction. This point is particularly critical. Districts should carefully review their proficiency tests to ensure that the skills to be measured are accurate reflections of the district's curriculum and actual classroom instruction. For example, a district may believe that it is important that students graduating from high school be able to balance a checkbook. That district must ensure that the curriculum requires teaching students not just basic computational skills but the actual task of balancing a checkbook as well. Unless districts can ensure a match between instruction and their proficiency tests, they may be vulnerable to legal challenge. One way of avoiding such a challenge is to introduce instruction in the skill into the curriculum and then to begin assessment of proficiency in that skill at a later time, when students have had sufficient instruction in the skill.

One approach to facilitating the assessment-instruction match is to involve classroom teachers in all phases of the proficiency assessment process, particularly in the selection or development of tests. The match is further facilitated by providing teachers with detailed descriptions of each of the competencies measured. Teachers should also be provided with instructional materials and teaching suggestions keyed to the specific competencies measured in the proficiency test. This keying of instructional materials to the tests serves a dual purpose in that it takes some of the preparation burden off the classroom teachers and increases the likelihood that they will teach the skills that are measured in the district proficiency test.

---

[2] "Developing Proficiency Programs in California Public Schools: Some Legal Implications and a Suggested Implementation Procedure," added in August, 1978, as Appendix K to the *Technical Assistance Guide for Proficiency Assessment.* Sacramento, Calif.: State Department of Education, 1977.

Step 3. Provide inservice training to classroom teachers. Inservice training should be provided teachers to inform them of the proficiency requirements, the district's response to the requirements, and the seriousness of the consequences for students who fail to meet the requirements. Teachers may also need inservice training in teaching or reinforcing the skills assessed in the proficiency test, particularly reading skills. Many high school teachers in particular have never been taught to teach reading and may need help in this area. Inservice training in the diagnosis of student deficiencies may also be necessary.

Step 4. Ensure that there is substantial and representative community and staff involvement in the adoption of proficiency standards. It may also be wise to involve parents, community members, teachers, and students in the setting of passing scores. (See Section III of the *Technical Assistance Guide* for a description of a suggested process for community involvement.)

Step 5. Ensure that assessment devices are valid with regard to professional psychometric standards and to their match with instruction. If persons with technical measurement expertise are not available in the district, the offices of county superintendents of schools or measurement consultants may be able to provide assistance in judging test validity. (The reference section of this paper contains a list of measurement textbooks for districts to refer to in evaluating the psychometric quality of their measures.)

Step 6. Enhance the district's instructional program in the basic skills. The primary purpose of the proficiency assessment law is not to prevent students from obtaining a high school diploma but to ensure that students who are having problems in the basic skills are identified and helped. This task in the proficiency assessment process may be both the most important and the most difficult to achieve.

It is important, therefore, that districts provide students with repeated opportunities to receive instruction and to demonstrate proficiency in district-adopted standards. The proficiency law requires these efforts by emphasizing early and periodic assessment, conferences with parents of students not demonstrating sufficient progress on the district proficiency measures, and supplementary instruction for such students.

Step 7. Reexamine the passing score on the proficiency measures. In the *Technical Assistance Guide,* an approach to setting passing scores is described. It should be stressed, however, that neither that approach nor any other will necessarily result in a "valid" passing score.

Since identifying with certainty what a passing score should be is not currently possible and since establishing the passing score is crucial in determining whether a student receives a diploma, it is particularly important that passing score decisions be made by a consensus of the participants in a community-based process. It is also recommended that persons involved in setting passing scores be provided with data from the trial administration of the test (field test data) that indicate how students performed on the measure along with the projected number of students who would fail if the passing score were set at various levels; for example, based on field test results, what number of students would fail the proficiency test if the passing score were set at 50 percent, 60 percent, or 70 percent? This information might be provided for seventh, ninth, and twelfth grade students as an indicator of how well a district is doing and how much progress from grade to grade could be expected if a district were to continue operating as it has been. It can also give an estimate of what ninth graders' performance might be when they reach the twelfth grade level. Such information also provides some baseline data with which to compare future efforts to improve the basic skills program. Exhibit A at the end of this paper is the policy developed by one district as an approach to the setting of passing scores and is noted here not because of the particular scores set but because of the flexibility of the scoring procedure. For districts which anticipate that large numbers of students will fail early assessments, the most defensible and "fair" approach may be to set a passing score that is lower than they may wish to set during the first year or two of the proficiency assessment process. The passing score may then be raised as the district improves the effectiveness of its remedial programs and hence its ability to bring a greater number of students to proficiency.

Step 8. Document all activities related to proficiency assessment. Districts should maintain records of all meetings, listing school and community persons who were involved in the proficiency assessment efforts. The record should include the number of persons involved, their constituency (for example, parents, teachers, students, or other community members), and the way they were involved (for example, selecting standards or setting passing scores.)

In addition, districts should be particularly careful to document their efforts to ensure a close match between assessment and instruction. Districts developing their own proficiency measures should also document test validation efforts.

Step 9. Administer diagnostic, enroute tests in the language the student is most familiar with. While all students must demonstrate proficiency up to district-adopted standards in the English language to receive a diploma, the law does not preclude giving enroute tests in the students' native languages. This procedure can be used to determine whether poor test performance is due to a language deficiency or to lack of proficiency in a basic skill. If the district's regular proficiency tests are translated into a student's native language, the tests should be reviewed for accuracy of translation by speakers of that language. (See Section III of the *Technical Assistance Guide* for elaboration on the assessment of limited- and non-English-speaking students.)

Step 10. Avoid speeded tests. Speeded tests may increase student anxiety and may decrease the accuracy of the responses to test items. The primary concern should be to obtain an accurate estimate of a student's proficiency in the skills being tested. Speed is not a critical factor in proficiency assessment.

Step 11. Give students lessons in test-taking techniques, and provide numerous opportunities for students to practice taking tests or quizzes designed to assess their proficiency in the skills measured in the proficiency test. This is not to imply that practice should be given on the same items but rather in the same skills that are measured on the proficiency test. Students should also be given practice in taking tests in the same format as the proficiency test. Students are more likely to be motivated to try to do well on proficiency tests if they have been successful in the practice quizzes. Therefore, practice quizzes should be available for testing even the most basic skills. In some cases portions of the proficiency tests used in the elementary grades would be appropriate practice quizzes for intermediate and high school students who are having difficulty with the high school version of the proficiency test.

Step 12. Review tests for biased items, using the approaches described in the next section.

Approaches to Identifying Biased Items

The identification of biased test items should be conducted in two phases: (1) before administering the field test, the actual test items should be reviewed; and (2) after administering the field test, results should be reviewed. Field test procedures are described in three California State Department of Education publications: the *Technical Assistance Guide for Proficiency Assessment* and both the secondary and the elementary versions of the *Sample Assessment Exercises Manual.*[3] To obtain more reliable estimates of the potential for bias, districts should field-test using the largest possible sample. Large samples may be difficult for many small districts to obtain; therefore, it is suggested that small districts collaborate on test development and field test efforts if possible.

Phase I: A Priori Item Review

This procedure simply involves looking carefully at each test item and trying to determine whether the content of the item is either inappropriate or biased for the groups of students whose proficiency is being assessed. Inappropriate items are those that result in measurement of something other than what they are designed to measure. A simple example is a computation word problem. The trait being measured is computation, but the assessment of the trait may be complicated by the fact that the student is required to read in order to respond to the item. It is possible that an item is inappropriate for all groups. As such the item would not be biased but should be deleted or revised. However, if the item is especially more difficult for one group than another, the item is probably biased. Both inappropriate and biased items should be identified and eliminated or revised.

Reviewing test items for bias should be conducted by a committee composed of members who are especially sensitive to the concerns of the groups they represent. Representatives of the following groups might be included:

- All ethnic and racial groups in the district
- Males and females who are sensitive to current sex-role issues
- Classroom teachers involved in teaching basic skills
- Student representatives of each of the various ethnic, racial, linguistic, and sex groups
- A person who is familiar with test development procedures. If no one in your district is specifically trained in these skills, county office personnel may be available, or a test development consultant might be brought in as needed.

---

[3] *Sample Assessment Exercises Manual* (Secondary and elementary editions, two volumes in each). Sacramento, Calif.: State Department of Education, 1978.

The following is a list of criteria that districts might wish to use in attempting to review test items for bias. It is important to remember that although the examples in the list are potentially biased, use of them in a test will not necessarily be unfair. If a district is uncertain, it should administer a field test and review the results before deciding to delete or revise an item. The district may also decide to keep the item and adjust the curriculum or the instructional program to include more instruction in the area covered by the test item. (For information on using test results to improve the curriculum, see "Linking Test Results to Instruction" on page M-9.)

Use familiar experiences. Districts should ensure that test items reflect experiences with which all groups represented in the district can reasonably be expected to be familiar. For example, the alternatives provided in the right-hand column in Example A are words that represent the class of words in the left-hand column but are more likely to be familiar to a variety of ethnic and cultural groups than are the words in the middle column and, consequently, will not be as likely to distort the assessment of the trait in question.

Example A

Class of intended word	Avoid using terms such as	Acceptable alternatives
soup	vichyssoise	potato soup
dog	malamute	German shepherd
occupational title	veterinarian	grocery clerk
rain shelter	parasol	umbrella
musical instrument	harpsichord	piano
flower	lotus	rose
color	mauve	purple

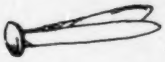
Another example is a case in which a student is provided with a picture of a dog and asked to indicate the correct initial consonant from among the four options *d, p, g,* and *b.* Spanish-speaking children may be more likely to select *p* because the Spanish word for dog is *perro.*

In trying to answer the question in Example B, persons who have not worked with office materials may not be familiar with such items as a paper fastener and would, therefore, have difficulty identifying the appropriate unit of measure. More common items might be a pencil or a table.

Example B

The drawing below represents a paper fastener. What unit would be best to use in measuring its length?

A. An inch
B. A foot
C. A yard
D. A metre



In Example C a student might confuse the word "volume" as it is used in this item with the use of the word to denote loudness, as in the volume of a radio. However, if this item appears in a test for a science course in which the meaning of the word *volume* has been taught, then this item would be appropriate.

Example C

Which unit is used to measure liquid volume?

A. Litre
B. Kilogram
C. Metre
D. Centigrade

Use the simplest language possible. When vocabulary is not being assessed, phrase directions, items, and response options in the simplest language possible. For example, the item in Example D can be simplified by substituting the word "best" for "most appropriately."

Example D

The distance from New York City to Los Angeles is most appropriately measured in:

A. Kilometres
B. Metres
C. Centimetres
D. Millimetres

Example E contains three more samples of the type of revisions that might make items easier to read and interpret.

Example E

As written	Suggested revision
How much money have you written checks for this month?	During the past month what is the total dollar amount of checks you have written?
$4.50/hr.	$4.50 per hour
Which of the following countries is not located east of the Nile?	Which of the following countries is located west of the Nile?

Avoid use of idiomatic expressions. Many idiomatic expressions that we take for granted are difficult or impossible to understand, especially for someone who is not a native speaker of English. In Example F, the idiomatic expression "meeting her expenses" may not have meaning for some students. A good substitute would be "paying her bills."

Example F

If Martha is paid $500 and pays $180 for rent, $20 for utilities, and $100 for food, how much money does she have left after meeting her expenses?

In Example G "Due" east or south may not be clear to some students. The word "due" could be eliminated.

Example G

To drive from Falls City to Hope, you would travel:

A. Due east
B. Due south
C. North, then west
D. East, then north

The use of the word "spotted" in Example H is idiomatic and may be replaced with "saw."

Example H

Chris Jones has finished the junior year at Truman High School and has been looking for a summer job. Chris spotted the following advertisement in the daily paper and has decided to apply for the job. . . .

Avoid offensive terms. Obviously, all racial or ethnic slurs are offensive and should be avoided along with all other offensive terms. Items should also reflect current usage regarding sex bias (for example, avoid the use of the word "girl" for an adult female and the use of "chairman" rather than "chairperson" or "chair").

Avoid using words that have different meanings for different groups. Using words that have different meanings or connotations for different racial or linguistic groups could distort test results. For example, words such as "blood," "hog," and "short" have different meanings for some blacks than they have for most whites. Specifically, "blood" may be used to refer to another black person, and "hog" and "short" may be used to refer to a car.

Use item content that reflects the composition of the community served by the district. Some educators recommend that a test include items reflective of each of the various cultural groups; others contend that a test should be designed to be as culturally neutral as possible. Regardless of the approach a district takes, the district should make every effort to design the instructional program to reflect the pluralistic nature of society.

Avoid items which reflect stereotypes. Examples I and J are samples of items that reflect roles stereotypically associated with certain ethnic groups or nationalities. Such categorizing can be easily avoided by changing the names or the occupations. Examples K and L reflect typical sex-role stereotypes and can be remedied by merely changing the sex of the names.

Example I

Jose and Roberto drive together 60 miles one way each day to their jobs at the car wash. If they drive 30 miles per hour, how long will it take them to get to work?

Example J

Ralph Cheng's father owns a laundry that makes over $5,000 per month. If there are 21 working days in a month, what is the average income per working day?

Example K

Sally bought a new sewing machine costing $270. She paid $50 as a down payment and was to pay the rest of the cost in six equal payments. If no other charges are included, how much would she pay each month?

Example L

Dick bought a new power saw costing $55. If he had $125 to spend, how much money would he have left if he also buys a drill costing $45?

Each item need not reflect the reverse of the stereotype, but a balance should be sought throughout the test. These same stereotypes can also be used conversely to create positive images as in Example M.

Example M

Maria was recently promoted to a position as branch manager at First Rate Bank. Her new salary is $250 more a month than she earned in her previous position. Her previous salary was $1,400 per month. What is her current monthly salary?

Avoid items that reflect concepts either nonexistent within one culture or unique to a culture. For example, members of the Navajo culture do not use words that refer to affect (such as "I feel . . ."). Another example is that in Texas a scorpion may be called a stinglizard.

Examine the content of items which have been identified as being biased in previous empirical studies. In a recent study it was found that many black children consistently had difficulty with items containing words such as "fewer," "closer," and "larger."[4] Again, this finding does not mean that a district should not test for knowledge of these concepts nor use the terms in a test item. Instead, if a district decides to test students on these concepts, it should be certain that the concepts are taught in the classroom. A district should also try to find substitutes for the terms when they appear in test items designed to measure knowledge of something other than the concepts associated with the terms. The words are, however, so common in everyday life that it may be more sensible to try to ensure that all students firmly understand such words. In such cases the information generated from efforts to identify biased items, particularly through the kind of analysis described below, can be useful in guiding instruction.

---

[4] J. Scheuneman, "A Procedure for Evaluating Item Bias in the Absence of an Outside Criterion." A paper presented at the annual meeting of the American Educational Research Association, San Francisco, April, 1976.

In another study it was found that test items involving television shows featuring blacks were biased in favor of blacks.[5] Judging from these results, a district should carefully screen items relating to books, television, or films to ensure that they do not favor any particular group.

Finally, it may be useful for the test review committee to review rules for writing test items prior to the item review process. (See "References" for a list of measurement texts that contain sections on item-writing rules.)

It is impossible in this paper to identify all of the cultural variations that may cause bias in test items. Because an awareness of such variations is essential to the creation of an unbiased test, the selection of persons to conduct a test bias review is a critical step in the test review process.

Phase II: Identifying Biased Items Using Field Test Results

Several statistical approaches have been developed for using field test results to examine the interaction between test items and groups. However, when the approaches were compared with each other, the results revealed that except for a very few cases, each approach identified different items on the same test as being biased.[6] In addition, most of these approaches are fairly complex and time-consuming, often requiring access to a computer if either the number of test items or students is very large. Because of the difficulty involved in such approaches, a simplified approach is presented here, and the more complex approaches have been referenced in the bibliography for interested districts.

It is important to reiterate that the primary concern here is not to determine whether there is a difference between the overall scores of various groups. The purpose of this approach is to identify test items that are more difficult for one group than would be expected based on the group's overall performance and to provide information for revising the measure accordingly. The steps in the procedure are as follows.

1. Administer each of the subtests that comprise the proficiency test. When conducting the field test, provide both teachers and students with forms on which to indicate their perceptions of any test items and directions that are unclear. (Exhibit B contains sample forms for this purpose.) The test administrator should tell students that the test is a field test and that the results will be used only to refine the test or to revise the instructional program, not to give grades or to award or deny diplomas.

2. Sort subtest results by the ethnic, sex, or socioeconomic status groups the district may be interested in looking at.

3. For each subtest within a content area, calculate the percent correct value of each item for each group. A percent correct value is determined by dividing the number of correct responses for an item by the total number of students who responded to the item:

$$p = \frac{\text{number of correct responses to item}}{\text{number of students who responded to the item}}$$

Percent correct values range from 0.1 to 1.0. Lower numbers indicate that the item is more difficult; higher numbers indicate easier items.

4. For each subtest, list the percent correct value for each item by group as indicated in Table 1.

5. Draw a vertical axis for each group (see Table 2) and mark it off by intervals that coincide with the percent correct value scores (in this case 0.1 intervals). Place an "x" next to the appropriate percent correct value on this vertical axis for each item. For example, in Table 1 the percent correct

TABLE 1
Percent Correct Values for Each Item in Math Subtest 1, by Subgroup

Item No.	Subgroup I	Subgroup II	Subgroup III
1	0.5	0.3	0.8
2	0.4	0.5	0.7
3	0.6	0.2	0.8
4	0.4	0.4	0.9
5	0.5	0.3	0.6
6	0.4	0.4	0.7
7	0.6	0.2	0.5
8	0.1	0.1	0.7
9	0.9	0.6	1.0
10	0.4	0.3	1.0

---

[5] G.H. Ironson, "A Comparative Analysis of Several Methods of Assessing Item Bias." A paper presented at the annual meeting of the American Educational Research Association, Toronto, March, 1978.

[6] This may be due to the variations in definitions and assumptions underlying the approaches.

TABLE 2

Plots of Percent Correct Values on Math Subtest 1, by Subgroup

Subgroup I		Subgroup II		Subgroup III	
Percent correct value	Item number	Percent correct value	Item number	Percent correct value	Item number
1.0		1.0		1.0 xx	9, 10
0.9 x	9	0.9		0.9 x	4
0.8		0.8		0.8 x	1, 3
0.7		0.7		0.7 xxx	2, 6, 8
0.6 xx	3, 7	0.6 x	9	0.6 x	5
0.5 xx	1, 5	0.5 x	2	0.5 x	7
0.4 xxxx	2, 4, 6, 10	0.4 xx	4, 6	0.4	
0.3		0.3 xxx	1, 5, 10	0.3	
0.2		0.2 xx	3, 7	0.2	
0.1 x	8	0.1 x	8	0.1	
0.0		0.0		0.0	
Mean = 4.8		Mean = 3.3		Mean = 7.7	
Standard deviation = 2.04		Standard deviation = 1.49		Standard deviation = 1.64	

value for Item 1 for Subgroup I is 0.5; therefore, place an "x" next to the 0.5 on the vertical axis (see Table 2) for the first subgroup and list the number of that item in the item numbers column. Item 2 in Table 1 for Subgroup I has a percent correct value of 0.4. Place an "x" next to 0.4 on Table 2 under the heading Subgroup I. Continue this process for all remaining items and groups. Again, the scores for the subtests should not be combined; separate graphs should be plotted for each subtest.

Phase III: Linking Test Results to Instruction

The graphs in Table 2 reveal several interesting and potentially useful pieces of information. The mean scores of subgroups I and II are consistently lower than are the scores of Subgroup III. In addition, the scores of students in Subgroup I vary more than the scores of students in subgroups II and III. The results also indicate that Item 8 is more difficult for subgroups I and II (with a percent correct value of 0.1 for each group) even when compared with the lower overall scores of those subgroups. It also appears that students in Subgroup III had no difficulty with the item. Item 8 should, therefore, be examined to determine what makes it more difficult for subgroups I and II. In reviewing such items, be certain to review all response alternatives (the possible answers), identifying the alternative most frequently chosen by each group, and examine the item stem (the part of the test item that provides the question or statement to which examinees are to respond) and directions for clarity.

It may be useful to ask several students who missed the item to explain why they responded as they did. On the basis of their responses, a district may wish to discard the item in favor of an improved item.

An analysis that can be particularly useful in planning an instructional strategy involves comparing subtest mean scores (average scores) by group. For example, it is obvious from the data in Table 3 that students in all groups performed better in the addition of whole numbers than in the calculation of interest rates. Apparently subgroups I and II may need more instruction in all areas of computation with emphasis on interest rates. This type of information along with individual student scores provides a blueprint for planning instructional strategies to help students having difficulty in acquiring basic skills.

TABLE 3

Average Percent Correct (Average Scores) on Math Subtests, by Subgroup

Subgroup No.	Subtest 1 Addition of whole numbers	Subtest 2 Division of percent	Subtest 3 Subtraction of fractions	Subtest 4 Measurement	Subtest 5 Calculation of interest rates
Subgroup I	60	40	30	40	20
Subgroup II	50	40	40	50	10
Subgroup III	90	80	70	80	60

Summary

The definitions of bias and fairness as they relate to proficiency assessment and the three-phase approach described in this paper should help districts identify and avoid bias in their proficiency tests. The first phase is an item review by persons representative of the various cultures in the community served by the district. This analysis is conducted prior to administering the field test. The second phase involves examining field test results to determine what revisions are needed in the test. Phase three is the adjusting of the curriculum and instruction as called for by the test results.

References

These references contain descriptions of statistical approaches to identifying biased test items.

Angoff, W. H., and S. F. Ford. "Item-Race Interaction on a Test of Scholastic Aptitude," *Journal of Education Measurement,* Vol. 10 (1973), 95–105.

Cleary, T. A., and T. L. Hilton. "An Investigation into Item Bias," *Educational and Psychological Measurement,* Vol. 8 (1968), 61–75.

Echternacht, G. "A Quick Method for Determining Test Bias," *Educational and Psychological Measurement,* Vol. 34 (1974), 271–80.

Green, D. R., and J. F. Draper. "Exploratory Studies of Bias in Achievement Tests." A paper presented at the annual meeting of the American Psychological Association, Honolulu, Hawaii, September, 1972.

Green, D. R. "Reducing Bias in Achievement Tests." A paper presented at the annual meeting of the American Educational Research Association, San Francisco, California, April, 1976.

Lord, F. M. *A Study of Item Bias Using Item Characteristic Curve Theory* (Preliminary report). Princeton, N.J.: Educational Testing Service, 1977.

Merz, W. R. "Factor Analysis as a Technique in Analyzing Item Bias." A paper presented at the annual meeting of the California Educational Research Association, Los Angeles, California, 1973.

Merz, W. R. "Estimating Bias in Test Items Utilizing Principal Components Analysis and the General Linear Solution." A paper presented at the annual meeting of the American Educational Research Association, San Francisco, California, April, 1976.

Ozenne, D. G.; N. C. Van Gelder; and A. J. Cohen. *Emergency School Aid Act (ESAA) National Evaluation: Achievement Test Standardization.* Santa Monica, Calif.: Systems Development Corporation, 1974.

Scheuneman, J. "A New Method of Assessing Bias in Test Items." A paper presented at the annual meeting of the American Educational Research Association, Washington, D.C., April, 1975.

Scheuneman, J. "A Procedure for Evaluating Item Bias in the Absence of an Outside Criterion." A paper presented at the annual meeting of the American Educational Research Association, San Francisco, California, April, 1976.

Veale, J. R., and D. I. Forman. "Cultural Variation in Criterion-Referenced Tests: A Global Item Analysis." A paper presented at the annual meeting of the American Educational Research Association, San Francisco, California, April, 1976.

These books contain descriptions of the procedures used in writing test items.

Anderson, S. B., and others. *Encyclopedia of Educational Evaluation: Concepts and Techniques for Evaluating Education and Training Programs.* San Francisco: Jossey-Bass, 1975.

Bormuth, J. R. *On the Theory of Achievement Test Items.* Chicago, Ill.: University of Chicago Press, 1970.

Popham, W. J. *Criterion-Referenced Measurement.* Englewood Cliffs, N.J.: Prentice-Hall, 1978.

Stanley, J. C., and K. D. Hopkins. *Educational and Psychological Measurement and Evaluation.* Englewood Cliffs, N.J.: Prentice-Hall, 1972.

Thorndike, R. L. *Educational Measurement* (Second edition). Washington, D.C.: American Council on Education, 1971.

Exhibit A

Sample Passing Score Policy

The minimum competency testing program is required to verify that students meet district standards in reading, writing, and mathematics. Any test used for such purposes has some well-known and limiting problems:

1. Tests have reliability and validity errors which may affect the score of any given pupil.
2. Test experts are cautious about placing absolute faith in a single administration of a test. The more times the test is given to a specific person, the more clearly the true scores are revealed.
3. Some students have problems taking tests. Anxiety levels, time, and motivation problems all cause some students to score less well than they are truly able to perform.
4. The arbitrary setting of a single score to determine whether the student has passed or not passed is somehow inconsistent with the factors mentioned in 1, 2, and 3.
5. Passing a competency test has been given an importance never before placed on such a test. A student's graduation and receipt of a diploma may be directly determined by the score on the test.
6. The requirement that districts prepare special instructional programs, which are certain to be expensive and require additional time and personnel, is a significant imposition for a program already struggling with many competing priorities.
7. It is very important that the testing program be maximally efficient and accurate. It would be a great waste to deny diplomas to students who can, in fact, read, write, and work math well enough to succeed in school and their lives. Likewise, it will be a disservice to grant diplomas to students who cannot perform tasks requiring these skills at levels generally acceptable in their community. The scoring procedure recommended here includes every possible effort to grant passing scores fairly to those who can, in fact, read, write, and compute and to identify those who need more instruction before they can achieve the minimum competencies.

Because of these factors this recommendation contains a scoring procedure in which high scoring students automatically pass and low scoring students are automatically judged not to have passed the test yet. Students whose scores fall in the middle range will have their test performance reviewed by school staff against some criteria and against the experience of the given student's teachers with that student's performance of the skills being verified.

Students who score 80 to 100 percent of all points available on the test shall be automatically certified to have passed.

Students who score 60-79 percent of all points on the test will have their responses evaluated by the school staff to determine whether or not their ability to read, write, and work math has been established at a minimum competency level. The school counselor shall review each student's performance, applying the following criteria:

1. The student's total score is accurately computed and totals 60 to 79 percent of all points available on the test.
2. The subsection scores for reading, writing, and mathematics are each at least 60 percent of the specific section's points or higher.
3. The majority of the student's teachers indicate he or she can perform these three skills well enough to do the required work in basic courses which require reading, writing, or mathematics skills.

The school counselor shall certify that all those students whose performance meets the three criteria above have passed the test.

Students who score between 60 and 79 percent of all points but whose performance *does not* meet the three criteria above shall have their test performance reviewed by a staff committee composed of the counselor (or test coordinator), principal, and the student's teachers of reading, writing, and mathematics. This committee may judge: (1) that the student does possess minimum competency and so passes the requirements; (2) that the student has passed one or two of the specific sections of the test and will be retested only on the section(s) not yet passed; or (3) that the student has not passed and the whole test must be taken again when next offered.

All students with scores on the total test between 0 and 59 percent of the total points will be automatically judged not to have passed the test yet.

The school will prepare an individualized program for each student who has not yet passed the test. This program will be presented to the pupil and his or her parents in a conference arranged by the principal or the test coordinator.

NOTE: This sample passing score policy was obtained from a school district and is included here to illustrate the difficulties involved in reaching consensus on passing scores.

Exhibit B

Sample Directions for Field Test Critique of Proficiency Tests by Test Administrators

This field test is being conducted for the purpose of ironing out problems with the directions and test items themselves. Please help us by completing the attached test administrator's critique as follows:

I. Review the test yourself as the students take it and record your criticisms.

II. Note any questions asked by students whether or not you can answer them. Note the page and question numbers in the spaces provided. Note, also, the ethnic group of the student asking the question.

III. After the test has been collected, distribute the attached student critique form to record students' reactions and complaints. Record your impressions of the students' general reaction to the test, including their attitudes and criticisms.

IV. Note any aspects of the testing in which time may have been a factor.

Thank you for this information. With your help and that of the other teachers, we are in the final phase of creating a set of high school proficiency tests that will be valid, reliable, and unbiased.

Exhibit B (continued)

Sample Form for Field Test Administrator's Critique

Teacher ______________________________ School ______________________

Grade level of students (please circle): 7 8 9 10 11 12

I. Test administrator's critique:

II. Questions from students:

Page number	Question number	Student's sex and ethnic group	Question/criticism

III. Students' general reactions and complaints:

IV. Did students have enough time to finish the test? Was time a factor in any other way? Explain.

Please return this form with the tests.

Exhibit B (continued)

Sample Form for Student Critique of Proficiency Test

Your form number ________________
Your grade level ________________

Tests are improved by field-testing them. YOU, the test taker, are one of the most valuable sources for test improvement.

Please help us to make this a fairer test by marking an X in a numbered box in response to each statement on the left. At the bottom of this sheet, you have a chance to give more detailed reactions in your own words.

Statements	Strongly disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly agree 5
1. The test was fair as a *minimum* standard for graduation.	☐	☐	☐	☐	☐
2. The test items were clear in the way they were worded. (Please list below the number of any items that were unclear and explain why they were unclear.)	☐	☐	☐	☐	☐
3. The directions given were clear and complete.	☐	☐	☐	☐	☐
4. The test items were interesting.	☐	☐	☐	☐	☐
5. The pictures and diagrams were large enough.	☐	☐	☐	☐	☐
6. The printing was large enough and was spaced clearly.	☐	☐	☐	☐	☐
7. The test was administered clearly and carefully. (Did you know how much time you had left?)	☐	☐	☐	☐	☐
8. The atmosphere was conducive to test-taking. (Was the room quiet?)	☐	☐	☐	☐	☐

General Reaction/Complaints. Please take a few minutes to describe your reactions to this test, referring to specific sections or questions on the test if you can.

Selected References

Alexis, Marcus, and Charles Wilson. *Organizational Decision Making.* Englewood Cliffs, N.J.: Prentice-Hall, 1967.

A view of the behavioral aspects of the decision-making process.

Bloom, Benjamin, and others. *Handbook on Formative and Summative Evaluation of Student Learning.* New York: McGraw-Hill, 1971.

Designed to help teachers become aware of the purposes of evaluation and the ways in which different types of evaluation instruments can be developed for use in the classroom.

Brodinsky, Ben. "Back to the Basics: The Movement and Its Meaning," *Phi Delta Kappan,* Vol. 58, No. 7, 522–27.

An analysis of the "back to the basics" movement and the changes it has produced across the United States.

Clark, James, and Scott Thompson. *Competency Tests and Graduation Requirements.* Reston, Va.: National Association of Secondary School Principals, 1976.

An extensive overview of the subject, which includes examples of competency tests currently in use in seven different subjects, embracing music, art, and money management in addition to the basics.

Cohen, Shelby Ruth. "The Teacher as Diagnostician," *Education,* Vol. 97, No. 4, 351–54.

An analysis of the role of measurement in educational diagnosis.

Cox, James. *Basics of Questionnaire Construction in Educational Settings.* Downey, Calif.: Office of the Los Angeles County Superintendent of Schools, 1976.

A review of the principles of questionnaire construction.

Delbecq, André L., and Andrew H. Van de Ven. "A Group Process Model for Problem Identification and Program Planning," *The Journal of Applied Behavioral Science,* Vol. 7 (November 4, 1971), 466–92.

A description of an operational procedure for group involvement in the decision-making process.

Developing Useful Objectives. Sacramento: California State Department of Education, 1975.

Provides practical examples in the writing of performance objectives.

Education for the People, Volume 1. Sacramento: California State Legislature Joint Committee on Education Goals and Evaluation and California State Department of Education, 1972.

A step-by-step guide designed to help school districts elicit community participation and achieve consensus on policy goals.

Hopper, Gordon. "Parental Understanding of Their Child's Test Results as Interpreted by Elementary School Teachers," *Measurement and Evaluation in Guidance,* Vol. 10, No. 2, 84–89.

A study revealing that most parents had great difficulty remembering their children's scores on the *Stanford Achievement Test* and found the multiplicity of subtest areas confusing.

Jenkins, Jeanne. "Perspectives on Decentralization in Los Angeles: Administrative and Community," *Education,* Vol. 97, No. 4, 364–66.

Addresses the differences in perspective of parents and educators concerning community involvement in educational processes.

Lyman, Howard. *Test Scores and What They Mean.* Englewood Cliffs, N.J.: Prentice-Hall, 1963.

A test interpretation guide for the novice.

Messick, Samuel. "The Standard Problem: Meaning and Values in Measurement and Evaluation," *American Psychologist,* Vol. 30, No. 10, 955–66.

Contains a highly conceptual treatment of the central relationships between standards and measurements.

Owen, Samuel, and Deborah Ranick. "The Greensville Program: A Commonsense Approach to Basics," *Phi Delta Kappan,* Vol. 58, No. 7, 531–33.

An examination of a successful proficiency-based program in Virginia.

Russell, Dale; John Plakos; and James Cox. *Developing a Workable Needs Assessment Process.* Downey, Calif.: Office of the Los Angeles County Superintendent of Schools, 1977.

A teaching strategy designed for those who are faced with implementing a needs assessment process.

Taylor, Ross. "What to Do About Basic Skills in Math," *Today's Education,* Vol. 66, No. 2, 32-33.

TM

RESOURCE CATALOG

for Proficiency Assessment

CALIFORNIA STATE DEPARTMENT OF EDUCATION
Wilson Riles, Superintendent of Public Instruction
Sacramento

First Revised Edition
November, 1978

VI-1

RESOURCE CATALOG for Proficiency Assessment

First Revised Edition

AUG 4 1980

The preparation and publication of this catalog was partly funded by an information dissemination grant from the National Institute of Education, Department of Health, Education, and Welfare. However, the material in this document does not necessarily reflect the position or policy of the National Institute of Education, and no official endorsement should be inferred.

The catalog was edited and prepared for photo-offset printing by the Bureau of Publications, California State Department of Education, 721 Capitol Mall, Sacramento, CA 95814, and was published by the Department.

Printed by the Office of State Printing
and distributed under the provisions of
the Library Distribution Act

1978

Contents

Page

FOREWORD iv

SOURCES OF BACKGROUND INFORMATION ON PROFICIENCY ASSESSMENT 1
- General Information 1
- Information on California Programs 5
- Vocational and Career Education Information 7
- Adult Education Information 8
- Special Education Information 9

SOURCES OF INFORMATION ON SPECIFIC SUBJECT COMPETENCIES 10
- Information on Language Arts Competencies 10
- Information on Mathematics Competencies 11
- Information on Competencies in Other Subjects 12
- Information on Competencies in Multiple Subjects 13

SOURCES OF INFORMATION ON TESTS, TESTING, AND ASSESSMENT 15

MATERIALS NOT AVAILABLE FROM SMERC 18

ORDERING INFORMATION 20

How to Use This Catalog

The *Resource Catalog for Proficiency Assessment* was compiled for educators who want more information about competency-based education and proficiency assessment. This list of documents is annotated and arranged according to whether the documents contain information about proficiency assessment in general, specific subject competencies, or tests and testing. The first two main catagories are further divided into subcategories, as listed in the table of contents.

Two types of documents are listed within each subcategory of the three main categories. Journal articles are listed first (if any are available). All journal articles (available only in photocopy format) have an identification number beginning with the letters "JJ." The identification number is given at the end of each bibliographic entry. The list of journal articles is followed by a list of other documents, which are available on microfiche cards. The microfiche documents can also be distinguished from the journal articles by their identification numbers. Microfiche documents processed by the Educational Resources Information Center (ERIC) have "ED" numbers; microfiche documents processed by the San Mateo Educational Resources Center (SMERC) have "ID" or "CM" numbers. All of the documents are available through SMERC.

All ordering of documents from SMERC must be done by identification number, not by author and title. For complete ordering instructions see "Ordering Information" on page 20.

The catalog also includes a section of documents that are not available from SMERC. Each entry in that section contains a description of the publication and full ordering information.

Foreword

Assembly Bill 3408 (Chapter 856, Statutes of 1976), which became effective on January 1, 1977, requires high school districts and unified school districts maintaining a junior or senior high school to establish district proficiency standards in reading comprehension, writing, and computation and to assess, on a prescribed basis, the performance of students in grades seven through twelve. The law requires that after June, 1980, no student who has not met the locally adopted standards of proficiency shall receive a high school graduation diploma. In 1977 Assembly Bill 65 (Chapter 894, Statutes of 1977), the comprehensive school finance legislation, extended the requirements to elementary schools, requiring districts to assess the performance of students at least once in grades four through six.

To help districts meet these requirements, the Legislature required the State Department of Education to prepare and distribute an "assessment framework" to all districts. The *Technical Assistance Guide for Proficiency Assessment* and the *Sample Assessment Exercises Manual,* volumes I and II, have been developed, addressing the needs of secondary school districts, and sent to California school districts to meet that requirement. As a result of AB 65, the *Technical Assistance Guide* has been revised and a new exercises manual has been developed to address the needs of school districts maintaining elementary schools.

This *Resource Catalog for Proficiency Assessment,* also included in the *Technical Assistance Guide,* was produced as a separate document since not all interested persons will have access to the *Technical Assistance Guide.*

The Department of Education, the San Mateo Educational Resources Center (SMERC), and other groups assembled these resource materials for use by those with responsibility for developing proficiency assessment procedures and related instructional programs. For this revision of the *Catalog,* previously appearing entries were revised and checked, many new entries were added, and all entries were newly classified and organized.

Most materials listed in the body of the *Catalog* are available from SMERC. Journal articles are available in photocopy format; other documents are available in microfiche format. In a few cases materials available on SMERC microfiche are also available from the original sponsoring agencies in a "hard-copy" format. Such cases are noted in the entry. The *Catalog* also includes a section of resources that are not available from SMERC. These are materials considered important enough for inclusion despite the fact that the procedures for ordering them are not as centralized as for the SMERC documents. Ordering information accompanies the entries for each non-SMERC publication.

Wilson Riles

Superintendent of Public Instruction

Sources of Background Information on Proficiency Assessment

General Information

Journal Articles

Acheson, Keith A. "Developing Competency-Based Graduation Requirements: Tips and Guidelines," *Thrust for Education Leadership,* Vol. 5 (November, 1975), 10–12. JJ121*
Practical guidelines and suggestions for developing competencies required for high school graduation.

Cawelti, Gordon. "Requiring Competencies for Graduation: Some Curricular Issues," *Educational Leadership,* Vol. 35 (November, 1977), 86–91. JJ110

Cook, J. Marvin. "The D.C. Schools' Plan for Systemwide Achievement," *Educational Leadership,* Vol. 35 (November, 1977), 114–17. JJ115

Cram, David D. "The Ideal Course," *Training,* Vol. 12 (December, 1975), 74–76, 78. JJ47
A discussion of the twelve characteristics of an ideal training course, including behavioral objectives, provision for student differences, practice, feedback, diverse materials, and progress information.

Eisele, James, E., and Paul M. Halverson. "Assumptions Underlying Competency-Based Education," *Thrust for Education Leadership,* Vol. 5 (November, 1975), 4–6. JJ41
A setting forth of the assumptions underlying competency-based education from the viewpoint of proponents and opponents.

Gilman, David Alan. "Minimum Competency Testing: An Insurance Policy for Survival Skills," *NASSP Bulletin,* Vol. 61 (March, 1977), 77–84. JJ117

Glick, I. David, and others. "CBE: How to Prevent a Second Orthodoxy," *Educational Technology,* Vol. 15 (August, 1975), 17–20. JJ42
An argument that a complete transformation of classroom procedures and curriculum development is required to prevent the curriculum from becoming rigidified.

Herschbach, Dennis R. "Deriving Instructional Content Through Task Analysis," *Journal of Industrial Teacher Education,* Vol. 13 (Spring, 1976), 63–73. JJ46
A model for developing competencies within the vocational area, using task analysis as a means of incorporating current learning theory into instruction.

Hornbeck, David W. "Maryland's 'Project Basic'," *Educational Leadership,* Vol. 35 (November, 1977), 98–101. JJ111

Huff, Marylyn. "A Board Member Looks at Requiring Competencies for Graduation," *Educational Leadership,* Vol. 35 (November, 1977), 108–13. JJ114

Keefe, James W., and Constance J. Georgiades. "Competency-Based Education and the High School Diploma," *NASSP Bulletin,* Vol. 62 (April, 1978), 94–108. JJ118
A review of the background of competency-based education, its merits, and drawbacks with recommendations from the National Association of Secondary School Principals.

Lewenstein, Morris R. "CBE: Commitment Is Not Enough," *Thrust for Education Leadership,* Vol. 5 (November, 1975), 7–9. JJ43
The use of competency-based education as a basis for curriculum planning to emphasize the intellectual process and program evaluation.

McClung, Merle Steven. "Are Competency Testing Programs Fair? Legal?" *Phi Delta Kappan,* Vol. 59 (February, 1978), 397–400. JJ133
An examination of possibly illegal designs or implementation procedures for competency tests, including a suggested model program.

Messick, Rosemary G. "Competency-Based Education: Inservice Implications," *Thrust for Education Leadership,* Vol. 5 (November, 1975), 16–18. JJ44
An article containing the argument that for competency-based education to become functional, administrators must gain greater expertise in curriculum and instruction and assume more leadership in staff development.

Nance, W. R. "Bus." "How Fares Competency Development in Oregon?" *Educational Leadership,* Vol. 35 (November, 1977), 102–5, 107. JJ113
A description of Oregon's experience with developing and implementing new requirements for high school graduation, based on minimum competency standards defined by school districts.

Pipho, Chris. "Minimal Competency Testing: A Look at State Standards," *Educational Leadership,* Vol. 34 (April, 1977), 516–20. JJ116

Schab, Fred. "Who Wants What Minimal Competencies?" *Phi Delta Kappan,* Vol. 59 (January, 1978), 350–52. JJ132
A survey of teachers, students, administrators, and parents in Georgia showing a diversity of opinion regarding the levels of reading, writing, listening, speaking, and arithmetic skills that should be required for high school graduation.

---

*See "Ordering Information," page 20, for a discussion of identification numbers.

Steiner, Richard L. "The Case for Competency-Based Education," *Science Teacher,* Vol. 42 (December, 1975), 17-18. JJ40
An identification of learning objectives in competency-based education, including an example of a long-range goal, with competency statements and performance indicators.

Strike, Kenneth A. "What Is a 'Competent' High School Graduate?" *Educational Leadership,* Vol. 35 (November, 1977), 93–97. JJ112
An argument that a key question underlying competency-based education is what kinds of knowledge and skills are of significant social importance to society and that society's fundamental interests are in the education of politically and economically competent citizens.

Microfiche Documents

Alvir, Howard P. *Saving Educational Dollars Through Quality Objectives.* ERIC, n.d. ED115584 115 pages. 2 microfiche.
A description for teachers of quality objectives, ones that are marked by clarity, accessibility, accountability, and ability to be evaluated by laypersons.

Anderson, Earl N. *Coping with Oregon's New Competency-Based Graduation Requirements: View from a Practitioner.* ERIC, 1975. ED105594 13 pages. 1 microfiche.
Background information about the new Oregon graduation requirements, to identify several major problems faced by Oregon school districts in putting into operation the new graduation requirements, and to describe the role of the consortium approach in providing technical assistance to local school districts.

Basic Proficiency Monitoring System. Half Moon Bay, Calif.: Cabrillo Unified School District, 1977. ID005828 84 pages. 2 microfiche.
A document on the basic proficiency monitoring system, including information on district philosophy, background and discussion material on proficiency assessment, teacher instructions, and student proficiency levels and tests.

Basic Skills Assessment Around the Nation. An Educational Testing Service information report. Princeton, N.J.: Educational Testing Service, 1977. ED152796 25 pages. 1 microfiche. Also available from Educational Testing Service, Basic Skills Assessment, Rosedale Road, Princeton, NJ 08541 (no charge).
A summary of minimim standards and basic skills assessment activities at the federal, state, and school district level, as of September, 1977.

Beaverton School's Student Competencies for Graduation. Beaverton, Oreg.: Beaverton School, 1975. ID005389 30 pages. 1 microfiche.
Competency statements in three major categories and a variety of subcategories: (1) personal development, including communication skills, computation skills, scientific-technical knowledge, health/mind/body; (2) social responsibility, encompassing citizenship, environmental awareness, and consumerism; and (3) career development, dealing with career decisions, career attitudes, working relationships, and career skills.

Chase, Cheryl. *Competency-Based Education: An Information Package.* Denver, Colo.: State Department of Education, 1977. ED146709 40 pages. 1 microfiche. Also available from Colorado Department of Education, Project ACCESS, State Office Building, 201 E. Colfax Ave., Denver, CO 80203 ($1).
An information package for teachers, administrators, school boards, and legislators interested in exploring the area of competency-based education, including background information and an annotated bibliography of ERIC sources.

Clark, James P., and Scott Thomson. *Competency Tests and Graduation Requirements.* ERIC, 1976. ED126160 76 pages. 1 microfiche.
A review of a variety of specific competency tests that measure skill achievement required for high school graduation; a background of the competency test movement; and lists of states and schools using competency tests and legislation and state board rulings concerning competency tests.

Competency Based Education in Oregon. Portland, Oreg.: Northwest Regional Educational Laboratory, 1976. ED147949 97 pages. 1 microfiche.
An examination of the competency-based education movement in Oregon, which resulted in the adoption of the Minimum State Requirements for Graduation in 1972 and the subsequent adoption of competency-based Minimum Standards for Oregon Public Schools in 1974.

Competency Based Education Sourcebook. Portland, Oreg.: Northwest Regional Educational Laboratory, 1977. ED147952 483 pages. 5 microfiche. Also available from Dept. K, Office of Marketing and Dissemination, Northwest Regional Educational Laboratory, 710 S.W. Second Ave., Portland, OR 97204 ($22.50, postage paid).
A comprehensive guide for curriculum planners, administrators, teachers, and others involved in the planning and implementation of competency-based education.

Comprehensive Education Plan, School Year 1977-78. Washington, D.C.: District of Columbia Public Schools, 1977. ED145590 399 pages. 4 microfiche.
A comprehensive plan providing for the completion of a year-long awareness program on competency-based education, revised instructional goals through a systemwide needs assessment, student population projections, and budgeting practices.

Conaway, Larry E. *Setting Standards in Competency-Based Education: Some Current Practices and Concerns.* SMERC, 1977. ID005598 26 pages. 1 microfiche.
A discussion of standard setting from the perspective of the practitioners presently faced with implementing competency-based programs.

Corder, Reginald. *New Directions in Assessment and Certification of Adults.* SMERC, 1977. ID005533 16 pages. 1 microfiche.

A review of educational trends in the certification of adults, including efforts to grant credit for basic competencies gained as a result of experience rather than formal class work.

Dobbert, Daniel J. *A General Model for Competency-Based Curriculum Development.* ERIC, 1976. ED122386 21 pages. 1 microfiche.

A nontraditional definition of competency and a detailed description of a comprehensive model for the development of competency-based curricula based on that definition. A flow chart of the model's seven major components and a detailed outline of its subprocedures are presented, and alternative strategies for accomplishing each component are discussed.

Evenson, Patricia O. *Competency-Based Curriculum Development for Rural Secondary Schools in Alaska: A User's Guide.* SMERC, 1977. ID005595 152 pages. 3 microfiche.

A description of the North Slope Borough School District's competency-based curriculum with the recommendations of other districts that have used the North Slope process and materials.

Fremer, John. *Setting and Evaluating Competency Standards for Awarding High School Diplomas.* SMERC, 1977. ID005599 23 pages. 1 microfiche.

A discussion of seven principles for developing and administering competency standards and for setting standards.

Fulfilling the Mission: A Program for Excellence, Efficiency and Effectiveness. In five volumes. Washington, D.C.: District of Columbia Public Schools, 1976. (Vol. I: *A Design for Competency Based Curriculum, Pre-Kindergarten–Grade Twelve.* Vol. II: *A Design for the Delivery of Educational Services.* Vol. III: *The Organizational Schema.* Vol. IV: Part I, *Planning*; Part II, *Research and Evaluation.* Vol. V: *Prospectus.*) Vol. I: ED133801 132 pages, 2 microfiche; Vol. II: ED133802 30 pages, 1 microfiche; Vol. III: ED133803 21 pages, 1 microfiche; Vol. IV: ED133804 21 pages, 1 microfiche; Vol. V: ED133800 21 pages, 1 microfiche.

A series of five publications covering the educational program of the District of Columbia Public Schools, the foundation of which is a competency-based curriculum. Volume I contains a description of the tasks students are expected to perform and the skills they must possess to perform the tasks. Volume II is an outline of the district's delivery system for educational services. Volume III contains an outline of the plan for implementing and evaluating the competency-based curriculum. The two parts of Volume IV contain descriptions of the district's planning division and its research and evaluation division. Volume V is a prospectus, providing an overview of the goals, priorities, and strategies for the program along with descriptions of the other four volumes.

Gadway, Charles J., and H. A. Wilson. *Right to Read: Functional Literacy, Basic Reading Performance: Summary and Highlights of an Assessment of 17-Year-Old Students in 1974-75.* SMERC, 1976. ID005592 62 pages. 2 microfiche.

A description of the exercises used in and the data derived from the Mini Assessment of Functional Literacy (MAFL) test, which was administered in 1974 and 1975 to determine the extent of functional literacy of American seventeen-year-old students.

Glass, Gene V. *Standards and Criteria.* SMERC, n.d. ID005555 55 pages. 2 microfiche.

An examination of the ordinary usage of the words *standards* and *criteria* in measurement literature, including the evolution of performance standards in criterion-referenced testing, methods of setting performance standards, and comments on the politics involved in the issue.

Graduation Process. Saint Paul, Minn.: Saint Paul Open School, 1977. ID005379 8 pages. 1 microfiche.

A description of the graduation requirements of the Saint Paul Open School, a demonstration school that has established competency standards in six general categories (career education, community involvement and current issues, consumer awareness, cultural awareness, information finding, and personal and interpersonal skills), which students meet by proving their ability through their own methods or projects.

Graduation Requirements Guidelines (Revised edition). Salem, Oreg.: Oregon Department of Education, 1977. ID005593 101 pages. 2 microfiche.

New guidelines designed to aid districts and communities as they develop and improve their graduation requirements.

Graduation Requirements Handbook. Portland, Oreg.: Parkrose School District, 1976. ID005367 49 pages. 2 microfiche.

Information for administrators on credit requirements, competency requirements, certification of competencies, competency sequence flow charts, methods for verifying competencies, and suggestions for recordkeeping and the use of alternative educational experiences in relation to Oregon's new graduation requirements.

Graduation Requirements: NASSP Special Task Force Report. Washington, D.C.: National Association of Secondary School Principals, 1975. ED111071 30 pages. 1 microfiche.

A report by the National Association of Secondary School Principals on current trends in graduation requirements, the meaning of the diploma, verification of requirements, alternative diplomas, and articulation with postsecondary education.

Howard, Eugene R. *Competency-Based Education: Trap or Opportunity.* Denver, Colo.: State Department of Education, 1977. ED149443 16 pages. 1 microfiche.

A discussion of the opportunities afforded by competency-based education to individualize instruction and to increase communication along with a description of eight traps that lie hidden in the CBE movement.

Hulsart, Richard. *Outline of Presentation: Assessing Basic Skills and Establishing Criteria for Competency.* SMERC, n.d. ID005600 6 pages. 1 microfiche.

An outline and bibliography on identifying basic skills objectives and evaluating basic skills.

Koffler, Stephen L. *An Analysis of ESEA Title I Data in New Jersey.* Occasional Papers in Education. Trenton, N.J.: State Department of Education, 1976. ED146217 88 pages. 1 microfiche.

A study of the distribution and effect of ESEA Title I funds in New Jersey, in conjunction with information concerning reading and mathematics achievement, program adoption, and demography to determine correlations with ESEA Title I programs.

Koffler, Stephen L. *New Jersey Statewide Minimum Standards: Results from the Program's First Year.* Occasional Papers in Education. Trenton, N.J.: State Department of Education, 1977. ED146216 52 pages. 1 microfiche.

The results of the proficiency test administered by the New Jersey Educational Assessment Program to all fourth, seventh, and tenth grade students in the state as a part of the 1976 law that established uniform statewide minimum standards in basic communication and computation skills.

Lasser, Barbara R., and Allan L. Olson. *Strategies for Implementation of Competency Based Education Programs.* Washington, D.C.: National Institute of Education, 1977. ED147950 146 pages. 2 microfiche.

An identification and discussion of considerations in installing and maintaining competency-based education programs.

Making Effective Use of the School Counselor, K-12. SMERC, 1977. ID005601 16 pages. 1 microfiche.

An examination of the services rendered by counselors at specific educational levels in the light of AB 3408.

Mathis, William J. *New Jersey Minimum Basic Skills Program.* Paper presented at the annual meeting of the National Council on Measurement in Education, April, 1977. Trenton, N.J.: State Department of Education, 1977. ED139118 17 pages. 1 microfiche.

A description of the newly instituted (1977-78 was the first year of full implementation) minimum standards program in New Jersey.

Miller, Lorin L. *The New State Graduation Requirements: An Overview and Discussion.* Eugene, Oreg.: Oregon School Study Council, 1977. ED135075 39 pages. 1 microfiche. Also available from Oregon School Study Council, 124 College of Education, University of Oregon, Eugene, OR 97403 ($1.50).

An examination of the Oregon competency-based high school graduation requirements that became effective in the fall of 1976, some of the pros and cons of the requirements, the early experience with the requirements, and speculation about the requirements' eventual impact in addition to a model plan to aid school districts in complying with the new requirements.

Minimal Competency Testing: Issues and Procedures. An Annotated Bibliography. Compiled by Barbara M. Wildemuth. ERIC, 1977. ED150188 20 pages. 1 microfiche. Also available from ERIC Clearinghouse on Tests, Measurement, and Evaluation, Educational Testing Service, Princeton, NJ 08541 ($2.50).

A selected bibliography—based on computer searches of the Educational Resources Information Center, National Technical Information Service, Psychological Abstracts, Exceptional Child Education Abstracts, and Dissertation Abstracts—compiled to aid those involved in developing programs to meet legislative requirements to institute competency testing.

The National Conference on Minimum Competencies: Trends and Issues. Proceedings of the conference held at the City University of New York on March 4, 1977. Edited by Richard M. Bossone and Lynn Quitman Troyka. New York: City University of New York, 1977. ED141404 119 pages. 2 microfiche. Also available from CUNY Research Foundation, Center for Advanced Study in Education, Graduate School of City University of New York, 33 W. Forty-second St., New York, NY 10036 ($3).

The six papers presented at the National Conference on Minimum Competencies: Trends and Issues, held on March 4, 1977, and sponsored by the Center for Advanced Study in Education of the City University of New York and the Board of Education of the City of New York.

Neill, Shirley Boes. *The Competency Movement: Problems and Solutions.* AASA Critical Issues Report. Washington, D.C.: American Association of School Administrators, 1978. ED150677 89 pages. 1 microfiche. Also available from AASA, 1801 N. Moore St., Arlington, VA 22209 (Stock No. 021-00510; $8.95).

An overview of the competency-based education movement, including school administrators' concerns and attitudes, the experience of several school districts and states with minimum competency requirements, and practical guidelines for implementing minimum competency requirements.

Oliver, Gordon. *School Graduation Requirements in Oregon: A Discussion of the Events Surrounding the 1972 Change in Requirements.* ERIC, 1974. ED098663 99 pages. 1 microfiche.

A description of the Oregon school "survival level" graduation requirements, the trends and events that led to their development, and the implementation program that followed their adoption.

Oregon Graduation Requirements: Guidelines for Planned Course Statements. Salem, Oreg.: Oregon State Department of Education, 1974. ED109749 52 pages. 1 microfiche.

Guidelines and sample materials developed in response to requests from teachers, curriculum planners, and administrators for clarification and modification of Oregon graduation requirements.

Oregon Graduation Requirements: Models and Guidelines for Personal Development Education, Section II. Salem, Oreg.: Oregon State Department of Education, 1973. ED085865 27 pages. 1 microfiche.
Models for districts for selecting and describing those competencies essential to ensure all students' survival as a citizen.

Parker, Charles C. "Junior High Student Responsibilities for Basic Skills." Paper presented at the annual meeting of the National Council of Teachers of English, New York, New York, November 24-26, 1977. ERIC, 1978. ED151786 11 pages. 1 microfiche.
A paper containing the argument that students should be trained to recognize acceptable and unacceptable performances in basic skill areas and should assume responsibility for attaining proficiency in these areas, including checking their own assignments, discovering their errors, and discussing their error patterns with teachers.

Parkrose Graduation Requirements: Student and Parent Handbook. Portland, Oreg.: Parkrose School District, n.d. ID005371 19 pages. 1 microfiche.
A handbook to help students and parents understand Oregon's graduation requirements, including credit requirements, competency requirements, certification of competencies, timelines and alternative educational experiences.

Place, Roger A. *The Performance-Based Curriculum.* ERIC, 1973. ED077118 18 pages. 1 microfiche.
A definition of the performance-based curriculum, including some instructional advantages of and obstacles to its inception and a brief case study.

Proceedings of a Conference on "Educational Reform: The Role of Competency-Based Education." Edited by Walter Hathaway and Sandra Scofield. Portland, Oreg.: Northwest Regional Educational Laboratory, 1976. ED135061 177 pages. 2 microfiche.
The proceedings of a four-day conference of education policy makers, practitioners, and researchers from more than 35 states on the subject of implementing competency-based education in public schools.

Shepard, Loretta A. *Setting Standards and Living with Them.* SMERC, 1976. ID005535 16 pages. 1 microfiche.
A consideration of the requirements and pitfalls of standard setting and five recommendations for setting standards.

A Statement of Educational Philosophy, Goals, and Course Offerings for the Lower Yukon Regional Education Attendance Area. Juneau, Alaska: State Department of Education, 1977. ID005354 395 pages. 7 microfiche.
A statement of educational philosophy, twenty goals of education, a basic description of the instructional program, and planned course statements for each offering from grades seven through twelve.

Stiles, Richard L. *Providing for Competency Attainment.* SMERC, 1978. ID005966 4 pages. 1 microfiche.
A discussion of the processes involved in defining, developing, implementing, and evaluating a program designed to teach the basic skills.

Thieleke, Gene A. *Graduation Requirements: What Are the Trends? Bloomfield Hills Public Schools Graduation Requirements, 1976-Present.* ERIC, 1976. ED123731 13 pages. 1 microfiche.
The graduation requirements of the Bloomfield Hills public schools, including the credits that must be earned in grades ten through twelve and the minimum competencies that must be achieved in each of 14 areas; for example, measurement skills, speaking skills, communication skills, employment and career skills, and physical fitness.

Thompson, Sydney. *Competency-Based Education: Theory and Practice.* ACSA School Management Digest, Series 1, No. 9. ERIC/CEM Research Analysis Series, No. 36. Sacramento, Calif.: Association of California School Administrators; Eugene, Oreg.: University of Oregon, ERIC Clearinghouse on Educational Management, 1977. ED149413 52 pages. 1 microfiche. Also available from the Association of California School Administrators, Box 39186, Rincon Annex, San Francisco, CA 94139 ($1.75 ACSA members; $2.75 nonmembers).
An outline of competency-based education in theory (its definition, implications, benefits, and problems) and in practice (a description of three CBE programs currently in operation–California's Basic Skills Program, Oregon's Life-Role Program, and the Fairfield-Suisun School District Career Major Program), with some conclusions about creating a successful CBE program.

Wilson, Robert M., and Marcia M. Barnes. *Survival Learning Materials.* ERIC, 1974. ED101304 52 pages. 1 microfiche.
A booklet designed to provide ideas for teachers to use in developing packets of learning materials, including sections on following directions, locating references, interpreting forms, and obtaining personal information.

Information on California Programs

Microfiche Documents

Course Outlines: Elsinore Junior High School. Lake Elsinore, Calif.: Elsinore Union High School District, 1978. ID005933 84 pages. 2 microfiche.
Outlines for all courses offered at Elsinore Junior High School, including prerequisites, course length, overview, concepts to be covered, general student competency goals and testing procedures, and instructional materials.

Developing Proficiency Standards for Graduation from High School. Glendora, Calif.: Glendora Unified School District, 1977. ID005541 190 pages. 4 microfiche.
Tentative procedures and guidelines as well as extensive

background data to assist personnel who will be developing proficiency standards.

Examples of Minimum Academic Standards for Graduation. Sacramento, Calif.: California Department of Education, n.d. ID005380 51 pages. 2 microfiche.
Examples of basic academic standards for graduation; a brief management analysis for Hart Bill programs; a paper by James Popham on the merits of criterion-referenced measurement strategies; a review of the California High School Proficiency Examination; a set of sample competency statements related to intellectual skills; and a listing of commercially available criterion-referenced tests and item banks.

Graduation Requirement Development Program. Folsom, Calif.: Folsom-Cordova Unified School District, 1975. ID005547 49 pages. 2 microfiche.
Information on (1) a list of old and new requirements under the California Education Code along with a summary of district progress to 1975; (2) a similar progress report for January, 1976; (3) a committee report on methods for writing individual educational plans; (4) a summary of student imput on required courses; and (5) proficiency standards for graduation.

Graduation Requirements for Folsom-Cordova Unified School District. Folsom, Calif.: Folsom-Cordova Unified School District, 1976. ID005616 37 pages. 1 microfiche.
An outline of the graduation requirements for the Folsom-Cordova Unified School District, including graduation policies and unit as well as specific subject area requirements.

Hart Bill Sourcebook. Los Angeles, Calif.: Office of the Los Angeles County Superintendent of Schools, n.d. ID005606 240 pages. 5 microfiche.
Sections of the publication *A Recommended Process and Rationale for Implementation of AB 3408* (available as ID005538) and material developed or compiled by the Office of the Los Angeles County Superintendent of Schools, providing both administration-oriented and program-oriented approaches to the implementation of AB 3408.

Management Plans for Development of Reading, Writing, and Math Proficiencies. Azusa, Calif.: Azusa Unified School District, 1976. ID005542 10 pages. 1 microfiche.
Objectives, activities, and timelines for staff involvement in the development of standards and practices for a proficiency program in reading, writing, and mathematics and for the development of graduation requirements for secondary schools.

McKinley, Donald R. *"Educational Malpractice: The Case of Peter Doe et al."* Paper presented at the annual meeting of the National Association of Secondary School Principals, Anaheim, California, February 14, 1978. ERIC, 1978. ED151952 24 pages. 1 microfiche.
A discussion of the suit of *Peter Doe* v. *San Francisco Unified School District,* in which a student who received a high school diploma was unable to read above a fifth-grade level or to function adequately in society—including a description of California's Hart Bill (AB 3408) as amended by AB 65 of 1977 and a model competency-based program developed by Merle S. McClung.

A Model for Establishing Standards: Composition and Mathematics. Sacramento, Calif.: Association of California School Administrators, 1972. ID003669 153 pages. 3 microfiche.
A manual to assist school district personnel in establishing standards of expected student progress and provide teachers with examples of instructional objectives in composition and mathematics.

The Newport-Mesa Unified School District Four-County Conference on Competency-Based Educational Systems. Newport Beach, Calif.: Newport-Mesa Unified School District, 1977. ID005356 244 pages. 5 microfiche.
The handbook used in the Newport-Mesa Unified School District at conferences on developing competency-based educational systems, including background materials, flowcharts, policy statements, competency statements, and specific forms used in the management of the program.

Popham, W. James. *Observations on the Hart Law.* SMERC, 1976. ID005388 8 pages. 1 microfiche.
An analysis of the key features of AB 3408 for California educators who are charged with its implementation.

Proposed Graduation Requirements. Santa Rosa, Calif.: Santa Rosa Elementary and High School districts, 1976. ID005386 53 pages. 2 microfiche.
A review of the graduation requirements of the Santa Rosa City Elementary and Santa Rosa City High School districts, including survival competency statements and performance indicators in the areas of reading, mathematics, writing, listening, speaking, and health maintenance; required courses; number of credits needed to graduate; variable credit; credit by examination; credit for travel; credit for community service; and credit for independent study.

Proposed Graduation Requirements: San Mateo Union High School District. San Mateo, Calif.: San Mateo Union High School District, 1975. ID004994 25 pages. 1 microfiche.
A report relating the graduation requirements in the areas of basic skills, experiences, and unit requirements along with the goals and objectives for the San Mateo Union High School District.

Questions and Answers on the Hart Act. Sacramento, Calif.: Association of California School Administrators, 1976. ID005382 12 pages. 1 microfiche.
The transcript of an interview with California Assemblyman Gary Hart, author of AB 3408, and Donald R. McKinley, Chief Deputy to the State Superintendent of Public Instruction, in which they discuss legislative intent, the State Department of Education's role, effects

on school climate, provisions for learning disabled or disadvantaged students, and the relation of the Hart Act to the Stull Bill and SB 90.

A Recommended Process and Rationale for Implementation of AB 3408 in Secondary Schools. Fresno, Calif.: Office of the Fresno County Superintendent of Schools, n.d. ID005538 48 pages. 2 microfiche.

A description of a process that districts may use to implement high school graduation requirements and standards of proficiency in basic skills, including the text of AB 3408 and a bibliography.

Report and Recommendations of the Educational Standards Committee. San Francisco, Calif.: San Francisco Unified School District, 1976. ID005540 52 pages. 2 microfiche.

Suggestions for minimum promotion standards from grades three, six, and nine in reading, writing, spelling, and mathematics; partial graduation requirements in the area of survival skills; minimum standards for mathematics and the social sciences; and off-site credit and science.

Santa Barbara High School District Competency Assessment Committee: Interim Report to the Board of Education. Santa Barbara, Calif.: Santa Barbara High School District, 1977. ID005532 21 pages. 1 microfiche.

An outline of the philosophy, activities, and projections of the committee appointed by the Santa Barbara Board of Education to create new policies on high school graduation requirements in line with the Hart Bill (AB 3408).

School Board Policy on Graduation Requirements and Common Core Performance Indicators. Fairfield, Calif.: Fairfield-Suisun Unified School District, 1977. ID005551 44 pages. 1 microfiche.

Three pamphlets: an outline of graduation and promotion requirements for secondary schools; an explanation of the majors, the program cores, and the common core objectives; and a listing of performance indicators for common core objectives.

School-Community Planning for Competency Requirements: First Steps Toward Implementing AB 3408. Hayward, Calif.: Office of the Alameda County Superintendent of Schools, 1977. ID005597 37 pages. 1 microfiche.

A description of the first of the four components devised by the Office of the Alameda County Superintendent of Schools to meet the requirements of AB 3408: the identification of competencies by methods which encourage the involvement of all semgents of the school and community.

Technical Assistance Guide for Proficiency Assessment. Sacramento, Calif.: California State Department of Education, 1977. ID005596 120 pages. 3 microfiche.

Basic information on the provisions, analysis, and legal opinions concerning AB 3408 as amended by AB 65; an analysis of the intent of the law; step-by-step guidelines to implementing the law; and a resource catalog containing a variety of source materials useful in planning, assessment, and curriculum design.

Vocational and Career Education Information

Journal Articles

Brown, Kenneth W. "Bookkeeping and Accounting: Competency-Based System for Accounting Instruction," *Business Education Forum,* Vol. 31 (April, 1977), 17-18, 20. JJ128

An outline of a proposed instructional system to help the accounting instructor meet the needs of a complex business society.

Bruce, Herbert, Jr., and Bruce Carpenter. "Competency-Based Curriculum, Kentucky Model," *American Vocational Journal,* Vol. 52 (January, 1977), 58, 60-61. JJ123

A description of the development and implementation of modules that will give teachers almost complete flexibility in individualized instruction in the area of competency-based vocational education.

Carpenter, C. Bruce, and Maynard J. Iverson. "Tractor Mechanics–An Individualized Competency-Based Vocational Agriculture Program," *Agricultural Education,* Vol. 49 (March, 1977), 202-3. JJ124

A description of the Kentucky model competency-based vocational education program for tractor mechanics and its implementation.

Hall, Katherine B. "A New Approach: Competency-Based Education," *Forecast for Home Economics,* Vol. 22 (September, 1976), 127, 161, 176, 178. JJ125

A discussion of the strengths and weaknesses of competency-based education, particularly in the area of home economics.

Microfiche Documents

Collier, Kenneth, and Duane Depuy. *Vocational Auto Mechanics: Course of Study, Grades Eleven and Twelve.* Brooklyn, Ohio: Brooklyn Public Schools, 1976. ED145240 166 pages. 2 microfiche.

A course of study for an automotive mechanics program presented as an example of an application of the instructional systems design (ISD) process.

Competency Based Curriculum Guide: Career Education. In four volumes. Fountain Valley, Calif.: Fountain Valley Elementary School District; and Huntington Beach, Calif.: Huntington Beach Union High School District, 1976. (The four volumes are subtitled as follows: *Grades K-3; Grades 4-6; Grades 7-8;* and *Grades 9-12.*) *Grades K-3*: ED145104 269 pages, 3 microfiche; *Grades 4-6:* ED145107 335 pages, 4 microfiche; *Grades 7-8:* ED145106 370 pages, 4 microfiche; *Grades 9-12:* ED145105 408 pages, 4 microfiche.

Curriculum activities guides based on an articulated kindergarten through grade twelve career education competency curriculum model.

Dual Role–Consumer and Homemaking: For the Occupation of Homemaker. Vocational home economics curriculum guide for Ohio. Columbus, Ohio: State Department of Education, 1974. ED150286 741 pages. 7 microfiche.

A kindergarten through grade twelve curriculum guide devoted to preparing students for dual occupations in the consumer and homemaking areas.

Kempton, Robert F. *Teaching Guide for Building Maintenance Occupations.* Amherst, Mass.: National Evaluation Systems, Inc., 1976. ED129985 138 pages. 2 microfiche.

A teaching guide for building maintenance, one of a series of five performance- and employer-based secondary level vocational education guides.

Kempton, Robert F. *Teaching Guide for Business Machine Repair Occupations.* Amherst, Mass.: National Evaluation Systems, Inc., 1976. ED129984 137 pages. 2 microfiche.

A teaching guide for business machine repair occupations, one of a series of five performance- and employer-based secondary level vocational education guides.

Kempton, Robert F. *Teaching Guide for Fire Cadet Occupations.* Amherst, Mass.: National Evaluation Systems, Inc., 1976. ED129987 149 pages. 2 microfiche.

A teaching guide for fire cadet occupations, one of five performance-based secondary level guides for vocational education.

Kempton, Robert F. *Teaching Guide for Social Service Occupations.* Amherst, Mass.: National Evaluation Systems, Inc., 1976. ED129986 130 pages. 2 microfiche.

A teaching guide for social service occupations, one of a series of five performance- and employer-based secondary level guides for vocational education.

Kempton, Robert F. *Teaching Guide for Still Photographic Technician Aide Occupations.* Amherst, Mass.: National Evaluation Systems, Inc., 1976. ED129988 135 pages. 2 microfiche.

A teaching guide for still photographic technician aide, one of a series of five performance-based secondary level guides for vocational education.

McKnight, Molly G. *Sample Course of Study for Distributive Education: Warehousing.* Grove City, Ohio: South-Western City School District, 1976. ED145242 104 pages. 1 microfiche.

A description of the content and development of a course in warehousing based on the students' present jobs and occupational expectations using the Interstate Distributive Education Curriculum Consortium system and materials as the foundation.

Paculba, Leslie A. *Forestry Occupations: Career Unit for Grades 5 and 6.* San Diego, Calif.: Office of the San Diego County Superintendent of Schools and the San Diego City Unified School District, 1975. CM001087 37 pages. 1 microfiche.

A curriculum unit guide designed to acquaint pupils with the necessity of maintaining forests, the occupations related to preserving the forests, and the skills necessary to perform forestry-related jobs.

Post, John O., Jr., and others. *Occupational Competence Access Project.* First year report. Boston, Mass.: State Department of Education, 1976. ED133566 190 pages. 2 microfiche.

A report on the first year of the Massachusetts Occupational Competence Access Project (OCAP), designed to provide secondary school students with marketable skills and to increase their ability to make decisions about careers, including the establishing of a competency-based career guidance system, a skill outcome exploratory program, and a system of computerized student files.

Preparation and Use of Instructional Modules in Driver and Traffic Safety Education. Washington, D.C.: Highway Users Federation for Safety and Mobility, 1970. ED147649 21 pages. 1 microfiche. Also available from American Driver and Traffic Safety Education Association, 1201 Sixteenth St., NW, Washington, DC 20036 ($.60).

A booklet for use by driver education teachers in conjunction with *A Resource Curriculum in Driver and Traffic Safety Education* (ED059372), including a learning module, instructions on how to prepare and use the module, and six sample modules.

Program Guide in Metal Technology. Santa Ana, Calif.: Office of the Orange County Superintendent of Schools; and Anaheim, Calif.: Anaheim Union High School District, 1973. CM001260 89 pages. 2 microfiche.

A metal technology program designed to provide experiences in the metal trades, including developing a saleable skill and earning a certificate of completion in one or more trade areas.

Richey, Rita C. "The Design, Implementation, and Revision of Instructional Materials in a Competency-Based Business Education Program." Paper presented at the American Educational Research Association annual conference, New York, New York, April, 1977. ED141595 40 pages. 1 microfiche.

An approach to implementing competency-based education programs using a combination of self-instructional modules, individualized management processes, and group instructional techniques designed for and used in a comprehensive consumer education program in several high school business education programs; a part of Project PACT (Pupil Achievement and Consumer Teaching), conducted at Wayne State University, Detroit, Michigan.

Adult Education Information

Microfiche Documents

Adult Career Education Counseling Project: Final Report. Portland, Oreg.: Northwest Regional Educational Laboratory, 1978. ED143828 24 pages. 1 microfiche.

The final report on a special demonstration project to develop, pilot test, evaluate, and disseminate a competency-based, open-entry/open-exit training program model for adult education guidance and counseling personnel, leading to the development of SAGE (Skills for Adult Guidance Educators), a nine-step training system.

Adult Competency Education Profile. Washington, D.C.: Bureau of Occupational and Adult Education, 1977. ED141593 103 pages. 1 microfiche.
A compilation of abstracts of 120 current federally funded adult performance level (APL) and adult competency education (ACE) projects being conducted in 34 states and the District of Columbia, developed for adult and secondary education administrators, teachers, and program developers who are beginning or are currently involved in APL/ACE programs.

Adult Competency Education Resources. Washington, D.C.: Bureau of Occupational and Adult Education, 1977. ED141592 43 pages. 1 microfiche.
A compilation of brief descriptions of 20 current resources for adult performance level (APL) and adult competency education (ACE) programs, developed for adult and secondary education administrators, teachers, and program developers who are beginning or are already involved with APL/ACE programs.

The Adult Performance Level Competency-Based High School Diploma. Austin, Tex.: University of Texas, 1976. ID005378 44 pages. 1 microfiche.
A description of the Competency-Based High School Diploma Program developed for adults in Texas as a flexible alternative to the conventional four-year diploma program.

Oregon Competency-Based Diploma: Adult High School. Field test model. Roseburg, Oreg.: Umpqua Community College, 1976. ID005556 99 pages. 2 microfiche.
A model indicating credit requirements and examples of competencies and their performance indicators for the Adult High School Diploma Program, allowing credit for the skills gained through life experiences.

A Research and Development Project to Design a System and Supporting Materials, to Provide an Adult Performance Level in Four Major Sub-Areas for Adult Basic Education. Austin, Tex.: Texas Education Agency, 1972. ED101099 75 pages. 1 microfiche.
A description of an adult performance level (APL) project, in which the primary goal was to produce sequential tests of APL objectives derived from the requirements of adult living in reading, writing, computation, and general knowledge.

Special Education Information

Journal Articles

Cox, Eunice W. "Competency-Based Instruction for Students with Exceptional Learning Needs: A Modular Approach to Curriculum Development," *California Journal of Teacher Education,* Vol. 3 (Fall, 1976), 47–62. JJ126

O'Dell, Stan L., and others. "Competency-Based Training for Severely Behaviorally Handicapped Children and Their Parents," *Journal of Autism and Childhood Schizophrenia,* Vol. 7 (September, 1977), 231–42. JJ130
Descriptions of the major components of a treatment program designed to help severely behaviorally handicapped children (two to sixteen years old) develop the necessary skills to function in regular classrooms or special education classes.

Microfiche Documents

Hopkins, Mary A., and Robert J. Brock. *Menomonie/UW-Stout TMR Program: A Vocational/Life Function Performance-Based Criterion-Referenced Curriculum.* Menomonie, Wis.: Menomonie School District and University of Wisconsin–Stout, 1977. ED146757 300 pages. 3 microfiche.
The discussion draft of a performance-based, criterion-referenced curriculum for teaching vocational skills to trainable mentally retarded (TMR) students, developed jointly by the University of Wisconsin at Stout and the Menomonie School District administration.

Mauser, August J. *A Performance Based Diagnostic Education Package for Teachers to Develop the Concept of Time and Telling Time in Learning Disabled Children.* Springfield, Ill.: State Department of Public Instruction, 1973. ED141987 41 pages. 1 microfiche. Also available from Department for Exceptional Children, 100 N. First St., Springfield, IL 62777.
A performance-based learning package for teachers of learning disabled children, providing a list of steps for students to take toward obtaining competency in time and time telling.

Sources of Information on Specific Subject Competencies

Information on Language Arts Competencies

Journal Articles

Hutchinson, Laveria F. "The Components of a Competency-Based Elementary Reading Program," *Reading Horizons,* Vol. 18 (Fall, 1977), 52–56. JJ122
A description of the components of a competency-based elementary reading program, including the concept of instruction, the elements of a learning module, the components of modular development, the role of the classroom teacher, and the level of student performance.

Raybin, Ron. "Minimum Proficiencies in Pasadena's Secondary Schools," *Phi Delta Kappan,* Vol. 59 (October, 1977), 128–30. JJ131
A description of the development and implementation of Pasadena's minimum essentials program in English.

Microfiche Documents

Compose Yourself: A Plan for Instruction in Written Composition, Grades 7-12. Los Angeles, Calif.: Los Angeles Unified School District, 1976. CM001161 75 pages. 2 microfiche.
The outline of a program of continuous composition for secondary students, containing details of prewriting experiences and five performance competency levels in descriptive, narrative, informative, and expository writing.

Golub, Lester S. *A Development Cycle for a Competency-Based English Curriculum, Grades K-12.* Eric, 1974. ED098580 11 pages. 1 microfiche.
A description of the components of a competency-based English curriculum, kindergarten through grade twelve, including listening, speaking, reading, writing, language, literature, and media.

Functional Reading Resource Manual for Teachers (Volumes I and II). Baltimore, Md.: State Department of Education, 1975. ED108177 330 pages. 4 microfiche.
A curriculum guide, containing objectives, activities, and materials for classroom use, designed to meet functional reading needs in grades one through twelve.

Hollifield, John H. *The Development of Teams-Games-Tournament (TGT) Curriculum Materials for Elementary Language Arts* (Report No. 238). Baltimore, Md.: Center for Social Organization of Schools, Johns Hopkins University, 1977. ED147828 47 pages. 1 microfiche.
A description of the development of a complete set of curriculum materials using the Teams-Games-Tournament (TGT) instructional process.

Language Arts Curriculum Guide. Portland, Oreg.: Parkrose School District, 1975. ID005361 106 pages. 2 microfiche.
A goal-based language arts teaching model, including program goals, course goals, instructional goals, and performance indicators.

Literature Objectives: Second Assessment. Denver, Colo.: Education Commission of the States, 1975. ED113737 18 pages. 1 microfiche.
The revision of the literature objectives first created in 1965-66 by the National Assessment of Educational Progress.

Mellon, John C. *National Assessment and the Teaching of English: Results of the First National Assessment of Educational Progress in Writing, Reading, and Literature–Implications for Teaching and Measurement in the English Language Arts.* ERIC, 1975. ED112427 133 pages. 2 microfiche.
A book for English teachers and other persons concerned about teaching English, containing a description of the contents of the writing, reading, and literature assessments with a synopsis of the questions asked and the answers obtained.

The Mississippi Catalog of Competencies for Public Elementary and Secondary Language Arts. Jackson, Miss.: State Department of Education, 1975. ID005603 203 pages. 4 microfiche.
A taxonomy of competencies for grades one through twelve with separate chapters for world literature and creative writing.

The Mississippi Catalog of Competencies for Public Elementary and Secondary Reading. Jackson, Miss.: State Department of Education, 1975. ID005602 159 pages. 3 microfiche.
A taxonomy of competencies for grades one through six; for primary, intermediate, and secondary remedial reading; and for developmental reading in both junior and senior high school.

Mullis, Ina V. S. *Highlights and Trends from National Assessment: Writing and Change in Writing Skills.* ERIC, 1976. ED128814 27 pages. 1 microfiche.
A discussion of the methods used in scoring the National Assessment of Educational Progress (holistic scoring, primary trait scoring, and presence/absence scoring) along with tables of findings, examples of essays, background questionnaires, and scoring guides.

Oldefendt, Susan J. ***Highlights and Trends from National Assessment: Changes in Reading Achievement, 1970-75.*** ERIC, 1976. ED128766 17 pages. 1 microfiche.

A compilation of the results of the first National Assessment of Educational Progress reading assessment and the change-in-achievement results for the Mini Assessment of Functional Literacy of seventeen year olds.

Reading Objectives: Second Assessment. Denver, Colo.: Education Commission of the States, 1974. ED089238 21 pages. 1 microfiche.

A revision of the objectives used by the National Assessment of Educational Progress in reading.

Reading Performance Objectives: A Model: Some Priority Performance Objectives in Reading Ninth Grade Equivalency. Phoenix, Ariz.: Arizona State Department of Education, 1972. ED094375 28 pages. 1 microfiche.

A sample set of objectives for testing ninth grade equivalency reading ability.

SLATE: Support for Learning and Teaching of English (Volume 2). Urbana, Ill.: National Council of Teachers of English, 1977. ED146629 22 pages. 1 microfiche.

A collection of newsletters, produced during the second year of activity of a standing committee of the National Council of Teachers of English, on standardized testing as it affects the teaching of English.

Suhor, Charles. *Mass Testing in Composition: Is It Worth Doing Badly?* New Orleans, La.: New Orleans Public Schools, 1977. ED147807 27 pages. [illegible] microfiche.

A description of the Paul Diederich system for testing students' writing skills, which yields statistically reliable data on individual students, and a report on a New Orleans project in which the Diederich system was implemented.

Information on Mathematics Competencies

Journal Articles

Bell, Max S. "What Does Everyman Really Need from School Mathematics?" *Mathematics Teacher,* Vol. 67 (March, 1974), 196–202. JJ49

A list of mathematical concepts that every person needs from the school mathematics experience to cope with the world.

Edwards, E. L., Jr., and others. "Mathematical Competencies and Skills Essential for Enlightened Citizens." *Arithmetic Teacher,* Vol. 19 (November, 1972), 601–607. JJ48

A list developed by the National Council of Teachers of Mathematics reflecting the basic mathematical competencies, skills, and attitudes essential for capable citizens.

Microfiche Documents

Buchanan, Aaron D., and Patricia A. Milazzo. "Proficiency Verification Systems: A Large-Scale, Flexible-Use Program for Evaluating Achievement in Mathematics." Paper presented at the annual meeting of the American Educational Research Association, New York, New York, April 4-8, 1977. ERIC, 1977. ED137369 32 pages. 1 microfiche.

A description of proficiency verification systems, a network of assessment and reporting components which can be combined to generate proficiency information about individual pupils and groups for use by teachers and school administrators.

Chumbley, Barbara. *Mathematics Objectives Skills System, K-6, M.O.S.S.* San Diego, Calif.: Office of the San Diego County Superintendent of Schools and the National Elementary School District, 1976. CM001284 184 pages. 4 microfiche.

Objectives and criterion-referenced test items for elementary math instruction, by grade level.

Lieberman, Marcus, and others. *High School Mathematics: Behavioral Objectives and Test Items.* ERIC, 1972. ED066497 810 pages. 8 microfiche.

An objective-item bank for high school mathematics.

Leiberman, Marcus, and others. *Intermediate Mathematics: Behavioral Objectives and Test Items.* ERIC, 1972. ED066495 587 pages. 6 microfiche.

An objective-item bank for intermediate mathematics.

Lieberman, Marcus, and others. *Junior High Mathematics: Behavioral Objectives and Test Items.* ERIC, 1972. ED066496 236 pages. 3 microfiche.

An objective-item bank for junior high mathematics.

Mathematics Curriculum Guide. Portland Oreg.: Parkrose School District, 1975. ID005357 32 pages. 1 microfiche.

A goal-based mathematics teaching model, including program goals, course goals, instructional goals, and performance indicators.

Mathematics Objectives, Level 8. Project SPPED. Albany, N.Y.: State Education Department, 1972. ED067258 164 pages. 2 microfiche.

Mathematics objectives and sample items intended to be an aid to teachers in constructing curricula and in making classroom goals clear and precise.

Mathematics Objectives, Level 6. Project SPPED. Albany, N.Y.: State Education Department, 1972. ED067237 190 pages. 2 microfiche.

Mathematics objectives and sample items intended as an aid to teachers in constructing curricula and in making classroom goals clear and precise.

The Mississippi Catalog of Competencies for Public Elementary and Secondary Mathematics. Jackson, Miss.: State Department of Education, 1976. ID005604 209 pages. 4 microfiche.

A taxonomy of competencies for grades one through eight and for separate secondary level courses: Fundamental Math I, Fundamental Math II, Algebra I, Algebra II, Geometry, Advanced Mathematics, Trigonometry, and Computer Mathematics.

National Assessment of Educational Progress. The First National Assessment of Mathematics: An Overview. Denver, Colo.: Education Commission of the States, 1975. ED127198 64 pages. 1 microfiche.

A summary of the results of a 1972-73 nationwide survey of the mathematical ability of young Americans by age level (nine-year-olds, thirteen-year-olds, seventeen-year-olds, and young adults ages twenty-six to thirty-five) and by sex, race, region of the country, level of parental education, and size and type of community.

Norris, Eleanor L., and John E. Bowes. *National Assessment of Educational Progress, Mathematics Objectives.* ERIC, 1970. ED063140 41 pages. 1 microfiche.
The mathematics objectives of the National Assessment of Educational Progress classified under three dimensions: (1) the use of mathematics; (2) content domain; and (3) objectives or abilities.

Objectives for the Minimum Proficiency Levels in Mathematics. Monterey, Calif.: Monterey Peninsula Unified School District, 1977. ID005964 14 pages. 1 microfiche.
Thirty-four objectives for a high school graduate's minimal competency in mathematics, followed by the school district's graduation level math proficiency test and its scoring key.

Systematic Teaching and Measuring Mathematics (STAMM) Mini-Sampler. Lakewood, Colo.: Jefferson County Public Schools, 1977. ED144843 34 pages. 1 microfiche.
An overview and a sample of some of the curricular materials developed in Jefferson County's Systematic Teaching and Measuring Mathematics (STAMM) program, which provides for continuous progress in mathematics, in kindergarten through grade twelve, using management by objectives.

Information on Competencies in Other Subjects

Journal Articles

Cook, J. Marvin. "Viewpoint–Measurement of Affective Art Objectives," *School Arts,* Vol. 77 (October, 1977), 14–17. JJ127
An article containing arguments to support the contentions that ways can be created to measure affective objectives in art and that instructional objectives may include affective criteria related to cognitive or psychomotor competencies in art.

Microfiche Documents

Basic Citizenship Competencies. Pacifica, Calif.: Oceana High School, 1976. ID005381 14 pages. 1 microfiche.
A citizenship competency system that was developed in response to a 1976 needs assessment survey and the Hart Act, including the general program goal, student competencies and performance indicators, and the Basic Citizenship Competency Examination.

Basic Science and Environmental Curriculum Guide. Portland, Oreg.: Parkrose School District, 1976. ID005358 109 pages. 3 microfiche.
A goal-based model for basic science and environmental instruction, including program goals, course goals, instructional goals, and performance indicators.

Consumer Education Competencies. Harrisburg, Pa.: State Department of Education, 1976. ID005376 26 pages. 1 microfiche.
A list of general competencies in four areas: value systems for consumers, decision-making procedures, rights and responsibilities of the consumer, and the role of the consumer in our economic system.

Curriculum Objectives, Grade 7: Science. Bakersfield, Calif.: Office of the Kern County Superintendent of Schools and Panama Union Elementary School District, n.d. CM001311 121 pages. 3 microfiche.
A curriculum objectives guide for grade seven, consisting of proficiency requirements and proficiency tests for life science and biological science.

Curriculum Objectives, Grades 7 and 8: Public Speaking/Drama. Bakersfield, Calif.: Office of the Kern County Superintendent of Schools and Panama Union Elementary School District, n.d. CM001239 61 pages. 2 microfiche.
Detailed proficiency statements for the areas of public speaking and drama.

Emerging Career Development. Portland, Oreg.: Parkrose School District, 1974. ID005369 131 pages. 3 microfiche.
A goal-based model for emerging career instruction, including program goals, course goals, instructional goals, and performance indicators.

Health Education Curriculum Guide. Portland, Oreg.: Parkrose School District, 1976. ID005365 68 pages. 2 microfiche.
A goal-based model for health education instruction, including program goals, course goals, instructional goals, and performance indicators.

Home Economics Department Curriculum Guide. Portland, Oreg.: Parkrose School District, 1975. ID005364 54 pages. 2 microfiche.
A goal-based model for home economics instruction, including program goals, course goals, instructional goals, and performance indicators.

Law-Focused Education: Iowa. Des Moines, Iowa: State Department of Public Instruction, 1977. ED147211 124 pages. 2 microfiche.
A resource booklet to help secondary students learn about the civil law portion of Iowa's judicial system.

Media Library Skills, Nine Competency Areas, K-12 Continuum. Sacramento, Calif.: Office of the Sacramento County Superintendent of Schools, 1977. CM001317 55 pages. 2 microfiche.
An outline of proficiencies in library media skills for kindergarten through grade twelve, including audio awareness, equipment use, human resources, leisure skills, literary heritage, orientation/appreciation, production, resource and reference, visual communications, and a special section on proficiencies required for student assistants enrolled in credit courses at the junior high and high school levels.

The North Carolina Social Studies Curriculum: A Focus on People, Culture and Change. Raleigh, N.C.: State Department of Public Instruction, 1976. ED139717 50 pages. 1 microfiche.
Guidelines, objectives, and competencies of the kindergarten through grade twelve social studies program.

Performing Arts Department Course Goals. Portland, Oreg.: Parkrose Public Schools, 1975. ID005360 51 pages. 2 microfiche.
A goal-based model for performing arts instruction, including program goals, course goals, instructional goals, and performance indicators.

Personal Finance Education Guide. Salem, Oreg.: State Department of Education, 1972. ID005375 34 pages. 1 microfiche.
A guide to help districts develop personal finance instructional programs at the secondary level, including program goals, performance indicators, suggested learning experiences, and evaluation techniques.

Physical Education Curriculum Guide. Portland, Oreg.: Parkrose School District, 1976, ID005374 16 pages. 1 microfiche.
A goal-based model for physical education instruction, including program goals, course goals, instructional goals, and performance indicators.

Proposed Personal Finance Guide. Portland, Oreg.: Parkrose Public Schools, 1976. ID005372 28 pages. 1 microfiche.
A goal-based model for personal finance instruction, including program goals, course goals, instructional goals, and performance indicators.

Social Studies Curriculum Guide. Portland, Oreg.: Parkrose Public Schools, 1976. ID005359 74 pages. 2 microfiche.
A goal-based model for social studies instruction, including program goals, course goals, instructional goals, and performance indicators.

Information on Competencies in Multiple Subjects

Microfiche Documents

Arithmetic Proficiency Test Goals and Proficiency Test: Written Expression. El Segundo, Calif.: El Segundo Unified School District, 1978. ID005925 22 pages. 1 microfiche.
A discussion and listing of the educational objectives, proficiency statements, and proficiency tests for arithmetic skills and language arts, including specific reference to grammar, spelling, sentence structure, and business forms.

Basic Competencies for High School Graduation. San Diego, Calif.: San Diego City Unified School District, n.d. ID005537 11 pages. 1 microfiche.
A preliminary list of basic competencies for high school graduation presented for discussion purposes.

Basic Exit Skills. Watsonville, Calif.: Pajaro Valley Unified School District, 1977. ID005545 8 pages. 1 microfiche.
A list of performance indicators in reading and mathematics for students completing grades three, six, eight, and twelve.

Basic Skill Standards: Writing, Reading, and Mathematics. Watsonville, Calif.: Pajaro Valley Unified School District, 1978. ID005924 17 pages. 1 microfiche.
Performance objectives or standards for students in the areas of writing, reading, and mathematics for grades three, six, eight, and twelve. No test items are included.

Competency-Based Education: Selected Programs. Fairfield, Calif.: Fairfield-Suisun Unified School District, 1975. ID005552 96 pages. 2 microfiche.
Four pamphlets outlining the suggested four-year course schedule for completing common core objectives, the program core competencies, and the major competencies in four program areas: public services, business, agriculture, and the special core (environmental skills, consumer skills, values).

Computation, Reading, and Writing Competencies for the Student of the San Mateo Union High School District. San Mateo, Calif.: San Mateo Union High School District, 1976. ID005377 13 pages. 1 microfiche.
Terminal objectives for student performance are listed in three subject areas: computation, reading, and writing.

Course of Study for Grades Kindergarten Through Eight, 1976-78. San Mateo, Calif.: Office of the San Mateo County Superintendent of Schools, 1976. CM001274 147 pages. 3 microfiche.
A course of study covering all designated curricular areas for kindergarten through grade eight.

Elementary Course of Study Guide, Alaska. Juneau, Alaska: State Department of Education, 1977. ID005817 75 pages. 2 microfiche.
A course of study guide containing definitions of the essential skills for the elementary curriculum in the areas of mathematics, social studies, science, and communication skills, to be used as a framework or guideline by school districts.

Elementary School Essential Objectives and Performance Indicators. Fairfield, Calif.: Fairfield-Suisun Unified School District, 1977. ID005553 132 pages. 3 microfiche.
Recommendations for specific changes on the essential objectives to be completed for each subject area at each grade level from kindergarten through grade six.

High School Graduation Requirements and Competency Examinations: Civic Awareness, Computational Skills, Communication Skills and Consumer Education. Carmichael, Calif.: San Juan Unified School District, 1977. ID005550 74 pages. 2 microfiche.
A list of minimum competencies for high school graduation and four revised competency tests: civic awareness, basic computation skills, basic communication skills, and consumer education.

Intermediate School Essential Objectives and Performance Indicators. Fairfield, Calif.: Fairfield-Suisun Unified School District, 1977. ID005554 82 pages. 2 microfiche.
Four pamphlets describing the Fairfield-Suisun Unified School District's junior high competency-based program, listing essential objectives and providing examples of student performance objectives and performance indicators.

Minimum Competencies for Graduation. Final report of the South Monterey County Schools Curriculum Workshop. Salinas, Calif.: Office of the Monterey County Superintendent of Schools, 1975. CM001282 37 pages. 1 microfiche.
The final draft of the South Monterey County Schools Curriculum Workshop recommendations for minimum standards of competence in language arts, mathematics, and science for graduation from high school, including procedures for developing local graduation requirements and a summary of RISE recommendations and California legislation on graduation requirements.

Reading Comprehension Test Specifications, Minimum Writing Test Specifications, Computation Test Specifications. El Monte, Calif.: El Monte Union High School District, 1978. ID005926 16 pages. 1 microfiche.
A compilation of test specifications for reading comprehension, minimum writing, and computation skills.

Shepardson, Marie E., and others. *Final Analysis and Annotated Bibliographies.* Eugene, Oreg.: University of Oregon, 1977. ED142189 188 pages. 2 microfiche.
Three analytic papers and three annotated bibliographies on mathematics, reading, and competency-based education.

Sources of Information on Tests, Testing, and Assessment

Journal Articles

Day, Gerald F. "Criterion-Referenced Measurement," *Man/Society/Technology*, Vol. 35 (December, 1975), 84–86. JJ51
A consideration of the uses for criterion-referenced measurement and the construction and use of criterion-referenced tests.

Fillbrandt, James R., and William R. Merz. "Minimum Proficiencies and the Fine Art of Setting Standards," *NASSP Bulletin*, Vol. 62 (February, 1978), 70–80. JJ119
An outline of the process of generating student proficiency tests, including item generation, pilot testing, tailoring proficiency measurement to job market needs, using community members as sample test populations, and analysis of test results.

Gilman, David Alan. "Minimum Competency Testing: An Insurance Policy for Survival Skills," *NASSP Bulletin*, Vol. 61 (March, 1977), 77–84. JJ117
An article in support of the argument that minimum competency testing will determine standards for learning and will effect a massive critical reassessment of educational programs.

Madaus, Goerge F., and Peter W. Airasian. "Issues in Evaluating Student Outcomes in Competency-Based Graduation Programs," *Journal of Research and Development in Education*, Vol. 10 (Spring, 1977), 79–91. JJ129
A discussion of the evaluation problems posed by competency-based graduation requirements.

Microfiche Documents

Alternative Methodologies for Competency Based Education: The State-of-the-Art. Portland, Oreg.: Northwest Regional Educational Laboratory, 1976. ED147948 158 pages. 2 microfiche.
A review of the state of the art of competency-based education (CBE) and a discussion of alternative methods for the development of CBE programs in public school systems.

Annotated Bibliography on Applied Performance Testing. Portland, Oreg.: Northwest Regional Educational Laboratory, 1975. ID005605 64 pages. 2 microfiche.
An annotated bibliography, containing nonevaluative summaries of documents grouped by content area: concepts, development, application, and bibliographies on applied performance testing; language arts; life skills; mathematics; physical education; sciences and vocational education.

Behnke, Grant. *A Call for Statewide Criterion-Referenced Test Item Pools.* San Diego, Calif.: San Diego Unified School District. 1975. ID005955 9 pages. 1 microfiche.
A paper written to advocate the initiation and support of efforts to create a quality criterion-referenced testing item pool based on a set of state benchmark objectives.

Bernstein, Ruby S., and Bernard R. Tanner. *The California High School Proficiency Examination: Evaluating the Writing Samples.* Curriculum Publication No. 1. Report of the Bay Area Writing Project. Berkeley, Calif.: University of California, 1977. ED147806 25 pages. 1 microfiche. Also available from Bay Area Writing Project, 5637 Tolman Hall, University of California, Berkeley, CA 94720. ($1.50).
A discussion of the writing sample which is part of the California High School Proficiency Examination, including a description of the test, an outline of the methods of scoring, and examples of candidates' responses at various scoring levels.

Competency Statements and Performance Indicators. San Jose, Calif.: Office of the Santa Clara County Superintendent of Schools, 1978. ID005927 8 pages. 1 microfiche.
A compilation of competency statements and performance indicators developed for an assessment package related to AB 65.

Considerations for Proficiency and Competency Testing. Princeton, N.J.: Educational Testing Service, n.d. ID005534 6 pages. 1 microfiche.
An examination of the procedures for and the academic and social considerations in establishing proficiency assessment programs.

Ebel, Robert L. *Some Thoughts on Testing for Minimum Competency.* East Lansing, Mich.: Michigan State University, 1977. ID005956 7 pages. 1 microfiche.
A discussion of the history of competency requirements and their importance in education, including an analysis of the causes of the decline in mastery of basic skills and the positive effects of minimal competency testing.

Educational Assessment Program: State Report 1976-77. Trenton, N.J.: State Department of Education, 1977. ID005967 331 pages. 6 microfiche.
The report of the New Jersey Educational Assessment Program for 1976-77, containing an analysis of the results of the reading and mathematics tests administered to students enrolled in grades four, seven, and ten.

English and Math Proficiency Examinations. Big Bear Lake, Calif.: Big Bear High School; and Concord, Calif.: Ygnacio Valley High School, 1977. ID005548 14 pages. 1 microfiche.
The English and math proficiency tests used to place incoming freshman at Big Bear High School and an English competency examination from Ygnacio Valley High School, California; no scoring or test administration information.

Estes, Gary D., and others. *A Criterion-Referenced Basic Skills Assessment Program in a Large City School System.* ERIC, 1976. ED124587 20 pages. 1 microfiche.
A discussion of the procedures and considerations used in developing a basic skills assessment program, including preliminary results on validity and reliability of the assessment instruments.

Fink, Arlene. *The Use of Data from Competency-Based Measurement: An Instructional Developer's View.* ERIC, 1976. ED128469 14 pages. 1 microfiche.
A review of the difficulties in developing competency-based achievement tests, including problems in finding expertise, formulating test items, and validating tests.

Georgia Statewide Testing Program. Atlanta, Ga.: State Department of Education, 1976. ID005390 39 pages. 1 microfiche.
A description of the Georgia Statewide Testing Program; a list of objectives for grades four and eight in reading, math, and career development; and sample questions from the criterion-referenced mathematics tests for both grade levels.

Junior High Unified: Sequencing and Keying of Unified Studies; Test Specifications for Criterion-Referenced Testing: Achievement-Awareness Record for Language Arts. Shawnee Mission, Kans.: Shawnee Mission Public Schools, 1975. ED116193 124 pages. 2 microfiche.
A language arts curriculum guide for grades seven through nine designed to synthesize language arts skills with social studies.

Klein, Stephen P., and Jacqueline Kosecoff. *Issues and Procedures in the Development of Criterion-Referenced Tests.* ERIC, 1973. ED083284 18 pages. 1 microfiche.
A discussion of the basic steps in developing criterion-referenced tests as well as the attendant issues and problems.

Koffler, Stephen L. *Basic Skills Mastery of New Jersey's College Bound Students.* Occasional Papers in Education. Trenton, N.J.: State Department of Education, 1976. ED146234 57 pages. 1 microfiche.
A discussion of the results of a 1975 statewide assessment of the basic skills mastery of a random sample of college-bound students in New Jersey.

Koffler, Stephen L. *The Basic Skills Thrust: An Investigation into Its Effectiveness.* Occasional Papers in Education. Trenton, N.J.: State Department of Education, 1978. ID005962 20 pages. 1 microfiche.
A comparison of the 1976-77 and 1977-78 results of the New Jersey Educational Assessment Program's statewide testing of students in grades four, seven, and ten—indicating that the decline of basic skills mastery in New Jersey seems to have been stopped.

Math Proficiency Test and Teacher's Guide. Redondo Beach, Calif.: South Bay Union High School District, 1977. ID005543 17 pages. 1 microfiche.
The mathematics proficiency test given to district freshmen and seniors and the teacher's guide to the test which correlates competencies to performance indicators and sample test items.

Measuring Performance: Verifying Competencies Through Observation and Judgment. Salem, Oreg.: State Department of Education, 1977. ED144990 40 pages. 1 microfiche.
A guide developed to assist Oregon school districts in meeting revised minimum state standards for planning and assessment, including a discussion of the teacher's role in judging student performance with respect to satisfying graduation requirements and guidelines for implementing an effective system of using teacher judgments in assessing students' life skills competencies.

Mione, Stephen A. *Criterion-Referenced Testing: A Critical Perspective.* ERIC, 1977. ED147757 27 pages. 1 microfiche.
A review of the literature related to criterion-referenced testing, which has been tied to trends in individualized instruction, competency-based education, and the accountability movement.

Mullis, Ina V. S. *The Primary Trait System for Scoring Writing Tasks.* ERIC, 1976. ED124942 34 pages. 1 microfiche.
A presentation of the rationale and procedures for implementing the National Assessment of Educational Progress system of scoring writing papers, including a national assessment exercise, the scoring guide developed for the exercise, sample responses for the score points, and the national results for this exercise.

Nickse, Ruth S. *Development of a Performance Assessment System for the Central New York External High School Diploma Program: An Educational Alternative for Adults: A Progress Report.* ERIC, 1975. ED110740 34 pages. 1 microfiche.
A description of the development of an alternative performance assessment procedure for certifying adults at the secondary school level in the New York External High School Diploma Program.

O'Reilly, Robert P., and R. T. Schuder. "Some Issues in the Measurement of Basic Competence in Reading." Paper presented at the annual meeting of the American Educational Research Association, New York, New York, April 4–8, 1977. ED148897 56 pages. 1 microfiche.
A discussion of the content and utility of two models of reading comprehension tests: the basic skills assessment model and the multiple choice cloze model.

Proficiency Test in Writing Questionnaire. Redwood City, Calif.: Sequoia Union High School District, 1976. ID005385 5 pages. 1 microfiche.

A short questionnaire, addressed to students, parents, school staff, and community members, asking for feedback on the district's proposed objectives and sample proficiency test on writing.

Rojas, Virginia P. *District Utilization of the Statewide Testing Program.* Occasional Papers in Education. Trenton, N.J.: State Department of Education, 1977. ED147326 55 pages. 1 microfiche.

The results of a survey of all local school superintendents regarding their districts' uses of the statewide New Jersey Educational Assessment Program data, including program changes, instructional changes, administrative changes, and dissemination of information.

Sachse, Thomas P., and James R. Sanders. *Applied Performance Testing.* SMERC, 1975. ID005539 100 pages. 2 microfiche.

A status report on applied performance testing and the efforts of the Clearinghouse on Applied Performance Testing; a 60-page bibliography related to applied performance testing; and guidelines for the evaluation of applied performance tests.

Sample Assessment Exercises Manual for Proficiency Assessment. In two volumes. Sacramento, Calif.: State Department of Education, 1978. (Vol. I: *Sample Exercises.* Vol. II: *Item Statistics for Grades 7, 9, and 11.*) Vol. I: ID005952 389 pages, 7 microfiche; Vol. II: ID005953 1000 pages, 22 microfiche.

An additional source of technical assistance to school districts in implementing the proficiency requirements of AB 3408 and AB 65, designed to accompany the *Technical Assistance Guide for Proficiency Assessment* (ID005596). Volume I: item specifications and sample assessment items in three models: school context, functional transfer, and applied performance; Volume II: a detailed description of the field test, an explanation of the reading and use of the item statistics, and item statistics for most of the items in Volume I.

Sample Competency Tests. Portland, Oreg.: Parkrose School District, 1976. ID005355 76 pages. 2 microfiche. Samples of multiple choice tests and instructions for administering mathematics competency tests.

Schalock, H. D. *Alternative Models of Competency Based Education* (Second edition). Portland, Oreg.: Northwest Regional Educational Laboratory, 1976. ED147951 183 pages. 2 microfiche.

A historical and conceptual review of the educational practices related to competency-based education, a proposal for a working definition of compentency-based education, an exploration of the implications of the definition, and a discussion of alternative programs to illustrate the variety among competency-based education programs.

Selected Math Competency Examinations. Bellflower, Calif.: Bellflower Unified School District; Elk Grove, Calif.: Elk Grove Unified School District; and Concord, Calif.: Ygnacio Valley High School, n.d. ID005544 30 pages. 1 microfiche.

Statements of mathematics competencies and the proficiency examinations for measurement of these competencies from two California school districts and one high school.

Senior High Assessment of Reading Performance. Los Angeles, Calif.: Los Angeles Unified School District, n.d. ID005383 25 pages. 1 microfiche.

An information packet on the contents and objectives of SHARP, including sample questions and a list of remedial instructional kits for students who have failed specific test objectives.

Social Studies Proficiency Test. Redwood City, Calif.: Sequoia Union High School District, 1976. ID005387 48 pages. 2 microfiche.

Sample test items to measure social studies skills; the framework for coordination of district social studies departments; and a matrix relating the program objectives to each social studies course offered by the district.

Test Collection Bibliographies: Criterion-Referenced Measures, July, 1973. Compiled by Pamela Rosen, ERIC, 1973. ED104910 18 pages. 1 microfiche.

An annotated bibliography of available criterion-referenced measures.

Wilmer, Mary Ann. *Minimum Basic Skills Survey Results.* Occasional Papers in Education. Trenton, N.J.: State Department of Education, 1977. ID005959 63 pages. 2 microfiche.

The results of a survey conducted by the New Jersey Department of Education in the spring of 1977 to obtain a statewide consensus on which skills should be minimum requirements for a student's completion of grades three, six, nine, and eleven.

Materials Not Available from SMERC

Unlike the items listed in the previous sections, the resources listed in this section are not available from SMERC. However, they are considered of sufficient importance and convenient availability to be included along with the information necessary to order copies.

An Assessment of the Writing Performance of California High School Seniors. Sacramento, Calif.: State Department of Education, 1977. 29 pages. $2.75 plus sales tax. Available from Publications Sales, California State Department of Education, P.O. Box 271, Sacramento, CA 95802.

This publication contains the results of a 1975 study conducted throughout California to determine (1) the degree to which the results of the written portion of the grade twelve assessment examination provided a valid measurement of writing ability; (2) the degree of writing competency demonstrated by California's high school seniors; and (3) the most typical strengths and weaknesses of the writing skills of those high school seniors.

Basic Skills Assessment: Manual for Scoring the Writing Sample. Princeton, N.J.: Educational Testing Service, 1977. 40 pages. $3. Available from Educational Testing Service, Princeton, NJ 08540.

This publication includes a discussion of the philosophy and procedures involved in analytical and holistic methods of scoring basic writing skills assessments and a guide to the use and scoring of the Educational Testing Service's Basic Skills Assessment Writing Program.

Brickell, Henry M. *Let's Talk About . . . Minimum Competency Testing.* Denver, Colo.: Education Commission of the States, 1978. 38 pages. 1-4 copies $5 each–less for quantity orders. Available from Education Commission of the States, 300 Lincoln Tower, 1860 Lincoln St., Denver, CO 80295; (303) 861-4917.

A combination discussion guide and mailable questionnaire to inform and record public and professional thinking on competency-based education and minimum competency testing.

The California Evaluation Improvement Project materials

Workbook on Program Evaluation ($8–$6.75 each for more than 25 copies)

Program Evaluator's Guide ($12–$10 each for more than 25 copies)

Evaluation Trainer's Guide ($9.50 each)

CEVAL Elementary School ($20)

Princeton, N.J.: Educational Testing Service, 1978. Available from Evaluation Improvement Program, Educational Testing Service, Box 2845, Princeton, NJ 08541.

A comprehensive packet of inservice training materials designed and field-tested over a period of three years by practitioners in California schools, the California Evaluation Improvement Project materials are directed at teachers, principals, and other program managers who want to be able to evaluate their own programs for their own use. The materials were developed for use in three- or four-day workshops, but are equally useful in other continuing-education modes. The *Workbook on Program Evaluation* is a do-it-yourself recording notebook with guiding text designed to guide the user through the component activities in program planning and evaluation: purposes, needs assessment, goals and objectives, evaluation design, assessment instruments, data collection, data analysis, data processing, program monitoring, program reporting, requirements, and resources. The *Program Evaluator's Guide* contains a discussion of the concepts and theories of program evaluation and a step-by-step guide to the developing and carrying out of a comprehensive plan of evaluation. The *Evaluation Trainer's Guide* is a detailed manual for teaching program evaluation workshops based on the *Program Evaluator's Guide. CEVAL Elementary School* is a simulation exercise for use in training educators in the judicious allocation of limited resources, the anticipation of issues, and the generation of evaluation information that will be useful in addressing issues. It includes handouts, an instructor's guide, and an audiocassette to pace the exercise.

Competency Based Education Sourcebook (Second edition). Northwest Regional Educational Laboratory, 1978. 560 pages. $24.50. Available from Office of Marketing, Northwest Regional Educational Laboratories, 710 S.W. Second Ave., Portland, OR 97204; (503) 248-6800.

A comprehensive guide for curriculum planners, administrators, teachers, and others involved in the planning and implementation of competency-based education.

The Competency Challenge: What Schools Are Doing. Arlington, Va.: National School Public Relations Association, 1978. 96 pages. $7.95. Available from National School Public Relations Association, Dept. 78-67, 1801 N. Moore St., Arlington, VA 22209.

An in-depth look at the issues involved in competency-based education, including constructing, administering, evaluating, and explaining competency tests; detailed accounts of specific state and local programs; case histories; and samples of competency tests currently in use.

Cooper, Charles R., and Lee Odell. *Evaluating Writing: Describing, Measuring, Judging.* Urbana, Ill.: National Council of Teachers of English, 1978. $5.75 plus $1.50 shipping and handling. Available from National Council of Teachers of English, 1111 Kenyon Road, Urbana, IL 61801; (217) 328-3870.

A discussion of the purpose of and procedures involved in the evaluation of basic writing skills.

A Guide to Identifying High School Graduation Competencies: Issues and Examples. Portland, Oreg.: Northwest Regional Educational Laboratory, 1978. 144 pages. $6.50. Available from Office of Marketing, Northwest Regional Educational Laboratory, 710 S.W. Second Ave., Portland, OR 97204; (503) 248-6800. Funded by the National Institute of Education and developed after three years of consultation among educators from many states, the guide contains a list of 77 competency statements and descriptions of how they were selected.

McClung, Merle Steven. "Competency Testing and Handicapped Students," *Clearinghouse Review,* Vol. 11 (March, 1978), 922–26.

This article is a discussion of the fairness and legality of competency testing programs for the handicapped. Questions are raised concerning exceptions for handicapped students, individual determinations, differential standards and diplomas, and differential assessment procedures.

McClung, Merle Steven. "Competency Testing: Potential for Discrimination," *Clearinghouse Review,* Vol. 11 (September, 1977), 439–48.

This article contains a discussion of the potential for discrimination in schools and districts in which competency testing is started. Areas addressed in the article include the following: racial discrimination, inadequate phase-in periods, unreliable or unvalidated tests, inadequate matching of the instructional program to the test, inadequate remedial instruction, and unfair apportioning of responsibility between students and educators.

The two articles by Merle McClung are available from the National Clearinghouse for Legal Services, 500 N. Michigan Ave., Suite 1940, Chicago, IL 60611; $2 for entire issue, including postage and handling.

Resources for Assessing Language Proficiency in Spanish. Los Alamitos, Calif.: SWRL Educational Research and Development, 1978. A set of materials including a storage album, one *Resource User Manual,* one *Resource Usage Log,* one *Teacher Booklet* for the initial evaluation and for each of the three proficiency levels, three cassette tapes, game materials, 100 student proficiency summaries, 100 initial evaluation booklets, and 30 student record booklets for each of the three levels. $50 for the complete set; $5 for a preview set. Available from Division of Resource Services, SWRL Educational Research and Development, 4665 Lampson Ave., Los Alamitos, CA 90720.

Resources for Assessing Language Proficiency in Spanish is a set of materials written completely in Spanish designed to allow bilingual school personnel to determine and describe an individual student's proficiencies in understanding, speaking, reading, and writing Spanish. The resources are not a test of language dominance or general aptitude; they are tools for use in planning, evaluating, and guiding instruction to build on present Spanish-language proficiency. No training is necessary to use the materials.

Ordering Information

Documents cited in this catalog are available from the San Mateo Educational Resources Center (SMERC) or from sources cited in the section "Materials Not Available from SMERC" on pages 18 and 19.

Costs to agencies subscribing to SMERC are lower than the costs to nonsubscribing agencies. A list of SMERC subscribing agencies is printed inside the back cover.

Cost for SMERC Subscribers

Any educator in an agency contracting with SMERC may request free microfiche reproduction of up to ten microfiche cards, after which a charge of 50 cents per microfiche card is assessed.

Journal articles (those with "JJ" numbers) are available in photocopy format only. A maximum of 20 pages will be reproduced at no cost, after which 15 cents is charged for each page.

Cost for Nonsubscribers of SMERC Services

Anyone may order reproductions of documents from SMERC. The charges for persons who are not on the staff of a subscribing agency are as follows:

75 cents per microfiche card
20 cents per photocopy page
$2 for handling

Payment must accompany the order.

How to Order from SMERC and Other Resource Agencies

Ordering should not be done by title, but by identification number—the number beginning with "ED" (ERIC documents); "ID" and "CM" (SMERC documents); or "JJ" (journal articles). Orders, which must also include the number of pages, the number of microfiche, and the date of publication, should be sent to:

Educational Resources Center
San Mateo Superintendent of Schools
333 Main St.
Redwood City, CA 94063
(415) 364-5600, ext. 4404

Copies of the documents cited in this catalog are also available at the following resource centers, where educators may review materials or have copies made:

San Diego Instructional Resources Center
6401 Linda Vista Road
San Diego, CA 92111
(714) 292-3557

LANCERS (Los Angeles Center for Educational Research Services)
9300 E. Imperial Hwy.
Downey, CA 90242
(213) 922-6397

ACCESS
Contra Costa County Superintendent of Schools
2371 Stanwell Dr.
Concord, CA 94520
(415) 689-4353

Information for ordering the documents cited in the section "Materials Not Available from SMERC" is included with the document entries.

For more information, call Education Information Resource Service, State Department of Education, (916) 322-6140.

78429—300 11-78 15M LDA

78-53 03-0284 300 11-78 15M

SMERC Subscribing Members

ALAMEDA COUNTY
Loretta Chin
(415) 881-6372

CALIFORNIA STATE DEPARTMENT
OF EDUCATION
Janet Buchanan
(916) 322-6140

EL DORADO COUNTY
Bonnie Wright
(916) 622-7130, ext. 58

GLENN COUNTY
Marjorie Jensen
(916) 934-7011

HUMBOLDT COUNTY
Helen Schober
(707) 445-7747

KERN COUNTY
Jack Keene/Sandy Larson
(805) 834-3700, ext. 355

LASSEN COUNTY
Dr. Ruth Gordon
(916) 257-2196

LINCOLN UNIFIED SCHOOL DISTRICT
Jonathan Pearce
(209) 477-9311, ext. 259

ORANGE COUNTY
Pat Fitzgibbons
(714) 834-3981

PLACER COUNTY
Dr. Martin Bauman
(916) 823-6222, ext. 27

RIVERSIDE COUNTY
Dr. Adrian Gentry/Mary Liette
(714) 787-6550

FOLSOM-CORDOVA SCHOOL DISTRICT
Peg Morrison
(916) 985-3042

SACRAMENTO CITY UNIFIED SCHOOL DISTRICT
Ted Porter
(916) 454-8561

SAN MATEO COUNTY
Linda Spence
(415) 364-5600, ext. 4405

SANTA BARBARA COUNTY
Bettie Day
(805) 964-4711, ext. 247

SANTA CLARA COUNTY
Susan Choi
(408) 299-4096

EVERGREEN SCHOOL DISTRICT
Margaret Ceresa
(408) 274-2520

FREMONT UNION HIGH SCHOOL DISTRICT
Walter Hale
(408) 735-6060

TULARE COUNTY
Don Gregory
(209) 733-6305

TUOLOMNE COUNTY
Jackie Mierop
(209) 532-7161

YOLO COUNTY
Mrs. Shipley Walters
(916) 666-8281